

File 350:Derwent WPIX 1963-2004/UD,UM &UP=200462

File 347:JAPIO Nov 1976-2004/May(Updated 040903)

File 348:EUROPEAN PATENTS 1978-2004/Sep W03

File 349:PCT FULLTEXT 1979-2002/UB=20040923,UT=20040916

Set	Items	Description
S1	36	AU='OLSEN J' OR AU='OLSEN J Z' OR AU='OLSEN JAN'
S2	1	AU='KNAPTON E'
S3	1	S1 AND S2
S4	9171	(WRIT??? OR PRINT???) (5N) (LETTER? ? OR ALPHABET?)
S5	0	(S1:S2 AND S4) NOT S3

3/34/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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016468530 **Image available**

WPI Acc No: 2004-626455/200461

Pre-writing teaching aid for assisting beginning writers in creating letters and pre-writing strokes, has magnetic stamps that are individually shaped as big line, little line, big curve, and little curve

Patent Assignee: HANDWRITING WITHOUT TEARS INC (HAND-N)

Inventor: KNAPTON E ; OLSEN J Z

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
CA 2457280	A1	20040811	CA 2457280	A	20040211	200461 B

Priority Applications (No Type Date): US 2003446269 P 20030211

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
CA 2457280	A1	E	12	G09B-011/00	

Abstract (Basic): CA 2457280 A1

NOVELTY - A magnetic-responsive drawing tablet (12) includes a housing (14), a writing surface (16), and a display structure (18) which shows an image in response to magnetic contact on the writing surface. An erasing mechanism (20) erases the image. Magnetic stamps, which are appropriately sized relative to the writing surface, are individually shaped as a big line, a little line, a big curve, and a little curve.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a beginning writers assisting method.

USE - For assisting beginning writers e.g. children in creating letters and pre-writing strokes.

ADVANTAGE - Provides a fun and effective learning experience, and can effectively assist beginning writers in creating letters and pre-writing strokes.

DESCRIPTION OF DRAWING(S) - The figure shows the plan view of teaching aid.

Drawing tablet (12)

Housing (14)

Writing surface (16)

Display structure (18)

Erasing mechanism (20)

pp; 12 DwgNo 1/6

Derwent Class: P85

International Patent Class (Main): G09B-011/00

File 1:ERIC 1966-2004/Jul 21
File 121:Brit.Education Index 1976-2004/Q2
File 437:Education Abstracts 1983-2004/Aug
File 35:Dissertation Abs Online 1861-2004/Aug
File 65:Inside Conferences 1993-2004/Sep W4

Set	Items	Description
S1	2	AU='OLSEN , J.'
S2	76	AU='OLSEN, J.'
S3	4	AU='OLSEN, JAN'
S4	38740	LETTER? ? OR ALPHABET?
S5	295686	WRIT??? OR PRINT???
S6	2	S1:S3 AND S4:S5
S7	2	RD (unique items)

7/6/1 (Item 1 from file: 1)
00679002 ERIC NO.: EJ379024 CLEARINGHOUSE NO.: IR518818
Compact Disk Databases: Are They Good for Users?
1988 (19880000)

7/6/2 (Item 1 from file: 65)
01951208 INSIDE CONFERENCE ITEM ID: CN020330160
Which Rules Can Be Used in Automatic Text Analysis?
CONFERENCE: Computational analysis of Danish texts-Seminar (199111)

File 88:Gale Group Business A.R.T.S. 1976-2004/Sep 29

Set	Items	Description
S1	137636	ERAS??? OR (RUB OR RUBS OR RUBBE3D OR RUBBING OR WIPE? ? OR WIPING) (2W) (OUT OR OFF) OR MEMORY OR MEMORIZ? OR MEMORIS?
S2	206817	IMITAT? OR COPY??? OR COPIE? ? OR REPRODUC??? OR MIMIC? OR EMULAT? OR RECREAT?
S3	5161	LETTER? ?(1N) (FORMING OR FORMATION) (S)ALPHABET OR CALLIGRA-PHY OR HANDWRITING OR CURSIVE() WRITING
S4	0	IC=G09B-011?
S5	24	S1(S)S2(S)S3
S6	24	RD (unique items)
S7	0	S6/2004
S8	2	S6/2003 [too recent]
S9	22	S6 NOT S8 [not relevant or duplicates]

File 1:ERIC 1966-2004/Jul 21

File 437:Education Abstracts 1983-2004/Aug

File 11:PsycINFO(R) 1887-2004/May W5

File 121:Brit.Education Index 1976-2004/Q2

File 35:Dissertation Abs Online 1861-2004/Aug

Set	Items	Description
S1	5088	ERAS??? OR (RUB OR RUBS OR RUBBED OR RUBBING OR WIPE? ? OR WIPING) (2W) (OUT OR OFF)
S2	145364	IMITAT? OR COPY??? OR COPIE? ? OR REPRODUC??? OR MIMIC? OR EMULAT? OR RECREAT?
S3	769	HANDWRITING() INSTRUCTION/DE OR HANDWRITING() SKILLS/DE OR P-REWRITING/DE
S4	371	HANDWRITING/DE AND (WRITING() INSTRUCTION/DE OR WRITING() SKILLS/DE) OR CALLIGRAPHY/DE
S5	156045	EDUCATIONAL() METHODS/DE OR LEARNING() STRATEGIES/DE OR TEACHING() METHODS/DE OR CUES/DE OR CUING/DE OR PROMPTING/DE
S6	358	S1 AND S2
S7	0	S6 AND S3:S4
S8	9	S6 AND S4:S5
S9	9	RD (unique items)
S10	88	S2 AND S3:S4
S11	30	S5 AND S10
S12	30	S11 NOT S8
S13	0	S12/2004
S14	0	S12/2003
S15	6424	HANDWRITING OR LETTER() FORMATION(S)ALPHABET OR CALLIGRAPHY OR PREWRITING
S16	284	HANDWRITING() INSTRUCTION
S17	176371	(TEACHING OR EDUCATION?? OR LEARNING) () (METHODS OR STRATEG-???)
S18	64352	CUES OR PROMPT???
S19	8	S6 AND S15
S20	0	S6 AND S16
S21	8	S19 NOT (S8 OR S11)
S22	8	RD (unique items) [not relevant]
S23	110	S15(S)S17
S24	102	S15(S)S18
S25	29	S1:S2 AND S23:S24
S26	35	S1:S2 AND S16
S27	46	S25:S26 NOT (S8 OR S11 OR S19)
S28	45	RD (unique items)

S29 0 S28/2004
S30 1 S28/2003 [not relevant]
S31 44 S28 NOT S30
S32 32 S31 AND (S15/TI,DE OR S16/TI,DE)
S33 0 S S31 AND S15:S16/TI
S34 20 S31 AND (S15/TI OR S16/TI)

9/7/9 (Item 1 from file: 437)

DIALOG(R) File 437: Education Abstracts

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The erasure of the sentence

Connors, Robert J 1951-2000

College Composition and Communication (Coll Compos Commun) v. 52 no1

(Sept. 2000) p. 96-128

DOCUMENT TYPE: Feature Article ISSN: 0010-096X

ABSTRACT: The writer discusses why three sentence-based pedagogies have been so completely elided within contemporary composition studies. The three pedagogies are the generative rhetoric of Francis Christensen, **imitation** exercises, and sentence-combining. Although the usefulness of these three pedagogies was never disproved, a growing wave of anti-formalism, anti-behaviorism, and anti-empiricism within English-based composition studies after 1980 doomed them to a marginality under which they still exist today. This has led to a culture of writing instruction that has very little to do with or to say about the sentence outside of a purely grammatical discourse.

12/6/1 (Item 1 from file: 1)

01043857 ERIC NO.: ED272923 CLEARINGHOUSE NO.: CS210027

Handwriting Instruction: What Do We Know? ERIC Digest.

1986 (19860000)

12/6/2 (Item 2 from file: 1)

00930617 ERIC NO.: EJ529372 CLEARINGHOUSE NO.: EC614325

Creating the "Write" Environment for Young Deaf Children.

1996 (19960000)

12/6/8 (Item 8 from file: 1)

00609292 ERIC NO.: ED265536 CLEARINGHOUSE NO.: CS209466

Kindergarten Performance for Reading and Matching Four Styles of Handwriting.

1984 (19840000)

12/6/10 (Item 10 from file: 1)

00605120 ERIC NO.: ED261364 CLEARINGHOUSE NO.: CS208001

The Personification Method of Instruction in Penmanship.

November 18, 1983 (19831118)

12/6/12 (Item 12 from file: 1)

00516009 ERIC NO.: ED226855 CLEARINGHOUSE NO.: PS013394

Behavior Analysis of Beginning Manuscript Handwriting.

March 1983 (19830300)

12/6/14 (Item 14 from file: 1)

00509960 ERIC NO.: ED220806 CLEARINGHOUSE NO.: CS006795

On Reading and Writing. Iowa Monograph.

June 1982 (19820600)

12/6/15 (Item 15 from file: 1)

00508920 ERIC NO.: ED219766 CLEARINGHOUSE NO.: CS207096
The Licking County Writing Project.
1982 (19820000)

12/6/16 (Item 16 from file: 1)

00489483 ERIC NO.: ED218653 CLEARINGHOUSE NO.: CS207076
A Case Study Observing the Development of Primary Children's Composing,
Spelling, and Motor Behaviors during the Writing Process. Final Report,
September 1, 1978-August 31, 1981.
1982 (19820000)

12/6/17 (Item 17 from file: 1)

00489473 ERIC NO.: ED218643 CLEARINGHOUSE NO.: CS207065
Handbook for Writing Practices.
1981 (19810000)

12/6/20 (Item 20 from file: 1)

00486202 ERIC NO.: ED215372 CLEARINGHOUSE NO.: CS206889
Writing as Problem Solving: Directions for Intervention.
November 1980 (19801100)

12/9/3 (Item 3 from file: 1)

DIALOG(R)File 1:ERIC
(c) format only 2004 The Dialog Corporation. All rts. reserv.
00768379 ERIC NO.: ED334735 CLEARINGHOUSE NO.: EC300481
**Teacher-Recommended Methods and Materials for Teaching Penmanship and
Spelling to the Learning Disabled.**
Stein, Regina A.
97pp.
June 1990 (19900600)

NOTES: Master of Arts in Teaching Thesis, Calvin College.

EDRS Price MF01/PC04 Plus Postage.

LANGUAGE: English

DOCUMENT TYPE: 42 (Dissertations/Theses--Masters Dissertations)

RECORD TYPE: ABSTRACT

COUNTRY OF PUBLICATION: U.S.; Michigan

JOURNAL ANNOUNCEMENT: RIEDEC1991

TARGET AUDIENCE: Practitioners

A questionnaire sent to 274 Michigan special education teachers in resource rooms and self-contained classrooms were designed to identify the treatment methods and materials used by these teachers to **teach penmanship** and spelling to learning-disabled students. A review of the literature examines the theoretical background of written expression, **practices** being used to **teach penmanship** and spelling, problems of the learning disabled, and remediation methods and materials used with the learning disabled. (Of the survey recipients, 92 sent useable replies for a response rate of 34%). Results indicated that teacher-preferred **methods** for **penmanship** were tracing, use of the D'Nealian manuscript and cursive styles, and air writing. The preferred materials included ditto sheets for writing, finger grip pencils, changeable plastic grips for pencils, color coded paper, and colored chalk. Teacher-preferred methods for spelling instruction were language experience and individual spelling, peer tutoring, and visual-auditory-kinesthetic-tactile techniques. Teacher-preferred materials included workbooks, spelling lists, and computer games. Appendices describe

the D'Nealian pencil grip, outline the reading and spelling patterns of children with learning disabilities, and provide a **copy** of the survey form. (76 references) (JDD)

DESCRIPTORS: Elementary Secondary Education; * **Handwriting** ; Instructional Materials; *Learning Disabilities; Remedial Instruction; Resource Room Programs; Special Classes; Special Education Teachers; *Spelling Instruction; Teacher Attitudes; * **Teaching Methods** ; **Writing Instruction**
IDENTIFIERS: Michigan

12/9/5 (Item 5 from file: 1)

DIALOG(R)File 1:ERIC

(c) format only 2004 The Dialog Corporation. All rts. reserv.
00682592 ERIC NO.: EJ382614 CLEARINGHOUSE NO.: PS516157

Reviews of Research: Handwriting Instruction.

Silvern, Steven B., ed., M. Lee Manning
Childhood Education, v65 n2 p112-14 Win 1988
1988 (19880000)

LANGUAGE: English

DOCUMENT TYPE: 70 (Information Analysis); 80 (Journal articles)

RECORD TYPE: ABSTRACT

JOURNAL ANNOUNCEMENT: CIJ MAY 1989

Reviews research on handwriting instruction that focuses on these questions: (1) Do learners need particular writing instruments and paper? (2) Should educators encourage students to trace or **copy** ? and (3) How can educators evaluate learners' writing? Offers implications and suggestions for handwriting instruction. (BB)

DESCRIPTORS: Elementary School Students; * **Handwriting** ; Literature Reviews ; Primary Education; *Teacher Role; **Teaching Methods** ; *Writing Evaluation; *Writing Exercises; * **Writing Instruction** ; **Writing Skills**
IDENTIFIERS: *Writing Implements

12/9/18 (Item 18 from file: 1)

DIALOG(R)File 1:ERIC

(c) format only 2004 The Dialog Corporation. All rts. reserv.
00487655 ERIC NO.: ED216825 CLEARINGHOUSE NO.: RC013378

Aboriginal Learning Styles and the Three Rs.

Harris, Stephen;

CORP. SOURCE: National Centre for Research on Rural Education, Nedlands (Western Australia). (BBB19494)

17pp.

November 1979 (19791100)

NOTES: Paper presented at the National Conference "New Directions in Rural Education" (Perth, Western Australia, November 1979).

AVAILABLE FROM: Not available separately; see RC 013 370.

Document Not Available from EDRS.

LANGUAGE: English

DOCUMENT TYPE: 143 (Reports--Research); 150 (Speeches/meeting papers)

RECORD TYPE: ABSTRACT

COUNTRY OF PUBLICATION: Australia; Western Australia

JOURNAL ANNOUNCEMENT: RIE OCT 1982

Aboriginal learning contexts are nonformal and are divided into 15 learning style characteristics (such as present-time orientation, authority, personal independence, and right to know) and 5 rules of interpersonal communication (right to speak, absence of interpersonal debate, avoidance of speaking roughly, avoidance of verbal confrontation, and attitudes toward asking or answering questions). If education is to be

meaningful, Aboriginal content and learning processes or methods need to be understood and incorporated into the classroom. Reading can be taught effectively in a way that is both theoretically sound from a Western viewpoint, and suitable to Aboriginal expectations about learning, utilizing methodologies such as the "lap method," Language Experience, Caption Books, and Instant Readers. Learning to speak English can be approached using TESOL methodologies which utilize dialog, role playing, and simulation of real life situations, along with Aboriginal learning methods. The Aboriginal way of learning, i.e., observation, repetition, **imitation** and learning-by-doing, is probably universally practised in the teaching of writing and mathematics. The question remains, what teachers are adequately trained or have a desire to adapt current school practice to Aboriginal learning methods? The appendices contain a chart contrasting formal and nonformal learning and a field-independent teaching strategies observation instrument. (AH)

DESCRIPTORS: Cognitive Style; *Cultural Context; Foreign Countries; Geographic Location; * **Handwriting Instruction** ; Indigenous Populations ; Learning Modalities; Learning Processes; Mathematics Instruction; Nonformal Education; *Reading Instruction; *Rural Education; *Second Language Instruction; **Teaching Methods**
IDENTIFIERS: *Aboriginal People; Australia

12/9/21 (Item 21 from file: 1)
DIALOG(R)File 1:ERIC
(c) format only 2004 The Dialog Corporation. All rts. reserv.
00480516 ERIC NO.: ED209686 CLEARINGHOUSE NO.: CS206654
Handwriting Resource Book, Grades 1-7.;
CORP. SOURCE: British Columbia Dept. of Education, Victoria. Curriculum Development Branch. (BBB16571)
91pp.
1981 (19810000)
ISBN: 0-7719-8588-6
EDRS Price MF01/PC04 Plus Postage.
LANGUAGE: English
DOCUMENT TYPE: 10 (Book); 52 (Guides--Classroom--Teacher).
RECORD TYPE: ABSTRACT
COUNTRY OF PUBLICATION: Canada; British Columbia
JOURNAL ANNOUNCEMENT: RIEAPR1982
GOVERNMENT: Foreign
Designed for use by both the elementary and the secondary school teacher, this resource book provides information and guidance on the **teaching of printing and cursive writing skills**. In the first part of the book, which deals with preparation, the physical requirements of **handwriting** are discussed and program planning suggestions offered. The second part concerns **handwriting** objectives and activities and focuses on the method whereby a student acquires and develops strong **handwriting skills**. The stages outlined take the student from readiness activities to printing, and from printing to refined cursive writing. **The third part sets out some specific printed and cursive letter models, together with suggestions on how students can best be taught to imitate them**, while the fourth part deals with the preparation and teaching of a handwriting lesson. This section identifies four distinct types of handwriting lesson, discusses the structural components of a lesson plan, and provides a chart containing suggestions for preparatory activities. It also includes sample lesson plans (one for each type of lesson). The fifth part covers evaluation and remediation and offers advice on how to isolate handwriting defects and

take remedial measures. A list of resource materials and a bibliography are included. (HOD)

DESCRIPTORS: **Cursive Writing**; Elementary Secondary Education; * **Handwriting Instruction** ; *Handwriting Readiness; * **Handwriting Skills** ; Lesson Plans; *Manuscript Writing (Handlettering); Resource Materials; **Teaching Methods**

12/9/22 (Item 22 from file: 1)

DIALOG(R)File 1:ERIC

(c) format only 2004 The Dialog Corporation. All rts. reserv.
00467378 ERIC NO.: EJ258754 CLEARINGHOUSE NO.: SP511577

Handwriting Practice: The Effects of Perceptual Prompts.

Hayes, David

Journal of Educational Research, v75 n3 p169-72 Jan-Feb 1982
1982 (19820000)

LANGUAGE: English

DOCUMENT TYPE: 80 (Journal articles); 143 (Reports--Research)

RECORD TYPE: ABSTRACT

JOURNAL ANNOUNCEMENT: CIJJUN1982

In a study, kindergarten and third grade students were given handwriting **copying** practice using different perceptual prompts to **reproduce** model letter forms. Results indicate that groups trained with perceptual prompts produced more accurate reproductions. (Author/JN)

DESCRIPTORS: Drills (Practice); Elementary Education; Grade 3; * **Handwriting Instruction** ; **Handwriting Skills** ; Kindergarten Children ; * **Teaching Methods** ; Visual Learning; *Visual Perception; *Writing Exercises

12/9/23 (Item 23 from file: 1)

DIALOG(R)File 1:ERIC

(c) format only 2004 The Dialog Corporation. All rts. reserv.
00435099 ERIC NO.: EJ241409 CLEARINGHOUSE NO.: SP510425

Handwriting: The Effectiveness of Copying from Moving versus Still Models.

Wright, C. Dan; Wright, Jone P.

Journal of Educational Research, v74 n2 p95-98 Nov-Dec 1980
1980 (19800000)

LANGUAGE: English

DOCUMENT TYPE: 80 (Journal articles); 143 (Reports--Research)

RECORD TYPE: ABSTRACT

JOURNAL ANNOUNCEMENT: CIJJUN1981

Pupils using a moving model of letter formation in the form of a flipbook demonstrate higher skill improvement than do students using a still model. (CJ)

DESCRIPTORS: Drills (Practice); Grade 1; * **Handwriting Instruction** ; *Handwriting Materials; * **Handwriting Skills** ; *Manuscript Writing (Handlettering); Primary Education; Sex Differences; * **Teaching Methods** ; Writing Exercises

12/9/24 (Item 24 from file: 1)

DIALOG(R)File 1:ERIC

(c) format only 2004 The Dialog Corporation. All rts. reserv.
00430914 ERIC NO.: EJ237224 CLEARINGHOUSE NO.: PS510169

Learning to Copy Letters: A Cognitive Rule-Governed Task.

Kirk, Ursula

Elementary School Journal, v81 n1 p28-33 Sep 1980

September 1980 (19800900)
LANGUAGE: English
DOCUMENT TYPE: 80 (Journal articles); 120 (Opinion papers)
RECORD TYPE: ABSTRACT
JOURNAL ANNOUNCEMENT: CIJAPR1981

Presents research findings that provide the basis for describing **copying** as a cognitive task, and suggests an approach to instruction and learning that is consistent with this view. (Author/MP)
DESCRIPTORS: Cognitive Processes; Elementary Education; *Elementary School Students; * **Handwriting Instruction** ; * **Handwriting Skills** ; * **Teaching Methods**

12/9/25 (Item 25 from file: 1)
DIALOG(R) File 1:ERIC
(c) format only 2004 The Dialog Corporation. All rts. reserv.
00250549 ERIC NO.: EJ137001 CLEARINGHOUSE NO.: SP504365
Handwriting: Copying Versus Tracing as the Most Effective Type of Practice

Askov, Eunice N.; Greff, Kasper N.
Journal of Educational Research, 69, 3, 96-8, Nov 75
1975 (19750000)
RECORD TYPE: ABSTRACT
JOURNAL ANNOUNCEMENT: CIJSEP1976

It was found that those doing **copying** practice exercises achieved significantly higher posttest scores than those doing tracing practice exercises. (PCB)
DESCRIPTORS: **Handwriting Instruction** ; *Learning Activities; Learning Processes; ***Memorization**; Perceptual Motor Coordination; *Perceptual Motor Learning; *Primary Education; **Teaching Methods**

12/9/26 (Item 26 from file: 1)
DIALOG(R) File 1:ERIC
(c) format only 2004 The Dialog Corporation. All rts. reserv.
00231744 ERIC NO.: ED106864 CLEARINGHOUSE NO.: CS202072
The Effects of Tracing Prompts and Discrimination Training on Kindergarten Handwriting Performance.

Hirsch, Edward; Niedermeyer, Fred C.;
CORP. SOURCE: Southwest Regional Laboratory for Educational Research and Development, Los Alamitos, CA. (BBB06572)
35pp. February 1972 (19720200)
SPONSORING AGENCY: Office of Education (DHEW), Washington, DC. (RMQ66000)
REPORT NO.: TM-3-72-01
EDRS Price MF01/PC02 Plus Postage.
DOCUMENT TYPE: 143 (Reports--Research)
RECORD TYPE: ABSTRACT
JOURNAL ANNOUNCEMENT: RIEOCT1975

In this study, the effects of two kinds of **letter formation** practice and a form of letter discrimination training on the handwriting performance of approximately fifty kindergarten children were investigated. After being pretested, subjects were randomly assigned to the following four treatment groups: (1) **copying** only, (2) faded tracing only, (3) **copying** and letter discrimination training, and (4) faded tracing and letter discrimination training. After ten weeks of instruction, it was found that the letter formation behavior of all groups had improved significantly. However, subjects who had received **copying** exercises performed significantly better than those who had received faded tracing exercises. Letter discrimination

training had no effect on letter formation performance. Implications for future program development are discussed. (Author)

DESCRIPTORS: Educational Research; * **Handwriting Instruction** ; * **Handwriting Skills** ; Instructional Materials; *Kindergarten Children; Preschool Education; * **Teaching Methods**

34/9/15 (Item 9 from file: 11)

DIALOG(R)File 11:PsycINFO(R)

(c) 2004 Amer. Psychological Assn. All rts. reserv.

0000207828 1974-07917-001

The effects of tracing prompts and discrimination training on kindergarten handwriting performance.

AUTHOR: Hirsch, Edward; Niedermeyer, Fred C.

AUTHOR AFFILIATION: Southwest Regional Lab. for Educational Research & Development, Los Alamitos, Calif.

JOURNAL: Journal of Educational Research--

<http://www.heldref.org/html/jer.html>, Vol. 67(2), 81-86, Oct, 1973

PUBLISHER: Heldref Publications--US--<http://www.heldref.org>

ISSN: 0022-0671--(Print)

DOCUMENT TYPE: Peer Reviewed Journal

MEDIA TYPE: Print

RECORD TYPE: Abstract

LANGUAGE: English

POPULATION GROUP: Human AGE GROUP: 100 (Childhood (birth-12 yrs)); 160 (Preschool Age (2-5 yrs))

ABSTRACT: Investigated the effects of 2 kinds of letter formation practice and a form of letter discrimination training on the handwriting performance of approximately 50 kindergarten children. After pretesting, Ss were randomly assigned to 1 of 4 treatment groups: (a) **copying** only, (b) faded tracing only, (c) **copying** and letter discrimination training, or (d) faded tracing and letter discrimination training. After 10 wks of instruction, it was found that the letter formation behavior of all groups had improved significantly. However, Ss who had received **copying** exercises performed significantly better than those who had received faded tracing exercises. Letter discrimination training had no effect on letter formation performance. (PsycINFO Database Record (c) 2003 APA, all rights reserved)

DESCRIPTORS: *Handwriting; *Kindergarten Students; *Teaching Methods

IDENTIFIERS: **copying** vs faded tracing vs **copying** & letter discrimination training vs faded tracing & letter discrimination training, handwriting, kindergarten students

SUBJECT CODES & HEADINGS: 3500 (Educational Psychology)

RELEASE DATE: 19740401

12/9/28 (Item 28 from file: 1)

DIALOG(R)File 1:ERIC

(c) format only 2004 The Dialog Corporation. All rts. reserv.

00044530 ERIC NO.: ED029869 CLEARINGHOUSE NO.: TE001379

The Development of a Program of Instruction for Beginning Handwriting Emphasizing Verbalization of Procedures to Increase Perception and an Analysis of the Effectiveness of this Program through Comparison with a Commercial Method. (Volumes I and II).

Furner, Beatrice Ann

817pp.

1967 (19670000)

NOTES: Ph.D. Dissertation, The University of Iowa.

AVAILABLE FROM: University Microfilms, A Xerox Company, 300 N. Zeeb Rd.,
Ann Arbor, Michigan 48103 (Order No. 67-9056, Microfilm \$10.35,
Xerography \$36.80).

Document Not Available from EDRS.

RECORD TYPE: ABSTRACT

JOURNAL ANNOUNCEMENT: RIEOCT1969

In this study, a teaching method stressing the learner's perceptual development was prepared for the purpose of teaching beginning handwriting to children. During a school year, 324 first-graders were guided to examine the formational processes of handwriting, to describe the correct procedures orally, to check their own procedures against the correct way, and to adjust their procedures accordingly. Over the same period, a group of 402 first-graders were taught to write by the more traditional method of copying. Effectiveness of the experimental program was determined through comparison of the resulting speed and quality of writing for both groups; the nature and extent of formational errors made by children randomly selected from both groups; the relationships between speed and quality of writing; the effect of sex on speed of writing, quality, and number of formational errors; and evaluation of such general characteristics affecting handwriting skills as handedness, method of holding the pencil and paper, sitting position, and attitude toward writing. Findings supported the general conclusion that the method using verbalization of handwriting procedures was effective and merits further study. (Author/JB)

DESCRIPTORS: Educational Strategies; Elementary Education; *English Instruction; Grade 1; *Handwriting; * Handwriting Instruction ; Handwriting Skills ; Kinesthetic Perception; Learning; Motivation Techniques; *Perceptual Development; Self Evaluation; Sensory Training; Sex Differences; Skill Development; Teaching Methods

34/6/3 (Item 3 from file: 1)

00401204 ERIC NO.: EJ223507 CLEARINGHOUSE NO.: CS715598

Facility of Handwriting Using Different Movements.

1979 (19790000)

34/6/4 (Item 4 from file: 1)

00296585 ERIC NO.: ED130280 CLEARINGHOUSE NO.: CS202984

The Use of Handwriting Rate for Predicting Academic Achievement and Suggesting Curriculum Modification.

1976 (19760000)

34/6/6 (Item 1 from file: 437)

0687329 H.W. WILSON RECORD NUMBER: BEDI00029609

Extra handwriting instruction : prevent writing difficulties right from the start

20001100

34/6/10 (Item 4 from file: 11)

0001381248 1995-20911-001

Relationship between visuomotor and handwriting skills of children in kindergarten.

1994

34/6/12 (Item 6 from file: 11)

0000681572 1985-18596-001

Effects of page prompts on beginning handwriting legibility.

1984

34/6/14 (Item 8 from file: 11)
0000493164 1979-27372-001
Evaluating handwriting performance: The student helps the teacher.
1979

34/6/16 (Item 1 from file: 35)
01769756 ORDER NO: AADAA-IMQ47746
The role of handwriting in ESL writing assessment
Year: 2000

34/6/17 (Item 2 from file: 35)
01446885 ORDER NO: AADAA-I0576397
A COMPARISON OF APPROACHES TO ON-LINE HANDWRITTEN CHARACTER RECOGNITION (
HANDWRITING CLASSIFICATION)
Year: 1995

34/6/18 (Item 3 from file: 35)
01145248 ORDER NO: AAD91-06491
EFFECTS OF STIMULUS DISTANCE ON CHILDREN'S HANDWRITING COPYING
PERFORMANCE
Year: 1990

34/6/19 (Item 4 from file: 35)
926331 ORDER NO: AAD86-16956
THE DEVELOPMENT OF CHILDREN'S GRAPHIC BEHAVIORS IN LETTER FORMATION (
HANDWRITING , DIFFERENTIATION THEORY, COGNITIVE, INFORMAL KNOWLEDGE)
Year: 1986

34/6/20 (Item 5 from file: 35)
882599 ORDER NO: AAD85-09009
A STUDY OF THE RELATIONSHIP BETWEEN COPYING SPEED AND COPYING MEMORY
AND SELECTED DEVELOPMENTAL AND PSYCHOEDUCATIONAL FACTORS AMONG STUDENTS
WITH LEARNING PROBLEMS (HANDWRITING , DIAGNOSIS, LEARNING DISABILITY)
Year: 1984

34/9/1 (Item 1 from file: 1)
DIALOG(R)File 1:ERIC
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00863218 ERIC NO.: ED371382 CLEARINGHOUSE NO.: CS214386
Emerging Issues in Handwriting Instruction .
Spillman, Carolyn V.; And Others
34pp.
April 02, 1994 (19940402)
NOTES: Paper presented to the Association for Childhood Education
International Study Conference (New Orleans, LA, March 30-April 2, 1994).
EDRS Price MF01/PC02 Plus Postage.
LANGUAGE: English
DOCUMENT TYPE: 143 (Reports--Research); 150 (Speeches/meeting papers)
RECORD TYPE: ABSTRACT
COUNTRY OF PUBLICATION: U.S.; Florida
JOURNAL ANNOUNCEMENT: RIENOV1994

Noting the general lack of research on **handwriting instruction** , a
study examined hand and eye dominance, hand positions, and handwriting
production of children. Subjects were 310 children from grades one through
five in classrooms of regular children, mainstreamed team teaching

classrooms, and self-contained gifted classes in a large elementary school in south Florida. Subjects wrote the letters of the alphabet, some other short passages for copying, and then wrote about whatever they wished. Subjects' eye dominance was also determined, and scores from standardized achievement tests in math and reading were collected. Results indicated: (1) no significant relationship between handwriting position and grade level; (2) significant relationships among dominances and hand positions; (3) no significant relationship between school placement and handwriting position, or between eye-hand dominance and school placement; and (4) no significant differences for reading achievement or math achievement due to eye dominance, no differences due to handwriting position in reading or math achievement, and no gender differences in eye dominance or handwriting position. Findings question previous assumption that handwriting positions form developmentally. Findings suggest that teachers must realize that all children do not need to hold their writing tools in the same manner.

(Contains 19 references, 6 tables, and 3 charts of data.) (RS)

DESCRIPTORS: Elementary Education; Handedness; *Handwriting; Lateral Dominance; Mathematics Achievement; Reading Achievement; Sex Differences; Writing Research; *Writing Skills

IDENTIFIERS: Educational Issues; Florida (South)

34/9/2 (Item 2 from file: 1)

DIALOG(R)File 1:ERIC

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00459314 ERIC NO.: EJ250690 CLEARINGHOUSE NO.: AA533397

An Experimental Study of Individualized Learning/Instruction in Copying, Tracking, and Handwriting Based on Feedback Principles.

Sovik, Nils

Perceptual and Motor Skills, v53 n1 p195-215 Aug 1981

August 1981 (19810800)

LANGUAGE: English

DOCUMENT TYPE: 80 (Journal articles); 142 (Reports--Evaluative); 143

(Reports--Research)

RECORD TYPE: ABSTRACT

JOURNAL ANNOUNCEMENT: CIJJAN1982

Close relationships between visuo-motor ability, copying, tracing, tracking, and writing performances were hypothesized as were the main effects of the experimental program with concern to the educational, psycho-motor skills in question. In general, predictions were confirmed by data in this study of 36 third-graders. (Author/SJL)

DESCRIPTORS: Cursive Writing; *Feedback; Grade 3; *Handwriting

Instruction; *Handwriting Skills; *Individualized Instruction; Methods Research; Primary Education; *Psychomotor Skills

34/9/5 (Item 5 from file: 1)

DIALOG(R)File 1:ERIC

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00010019 ERIC NO.: ED001019

SUGGESTED PREWRITING ACTIVITIES.

CIOTTI, RITA A.; KRAVITZ, IDA;

CORP. SOURCE: Philadelphia Public Schools, PA. (SYN72600)

11pp.

EDRS Price MF01/PC01 Plus Postage.

RECORD TYPE: ABSTRACT

JOURNAL ANNOUNCEMENT: DISA1965

THE POSITION TAKEN IS THAT A PREWRITING PROGRAM OF FROM APPROXIMATELY 4

TO 6 WEEKS WILL AID CHILDREN IN DEVELOPING THE NEURO-MUSCULAR COORDINATION NECESSARY IN LEARNING TO WRITE. CHILDREN ARE TAUGHT TO TRACE AND THEN **REPRODUCE** VARIOUS FIGURES INVOLVING ALL OF THE BASIC STROKES OF MANUSCRIPT. EXAMPLES ARE INCLUDED. IT HAS BEEN FOUND THAT SUCCESS OF THE PROGRAM DEPENDS UPON THE THOROUGHNESS OF THE PRESENTATION AND THE NEURO-MUSCULAR MATURITY OF THE CHILDREN.

DESCRIPTORS: Educational Media; *Elementary Education; * **Handwriting**

Instruction ; Language Arts; *Psychomotor Skills; *Teaching Guides

IDENTIFIERS: GREAT CITIES PROGRAM; PENNSYLVANIA; Pennsylvania

(Philadelphia)

34/9/7 (Item 1 from file: 11)

DIALOG(R)File 11:PsycINFO(R)

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0002118048 1996-93815-050

Development of cursive handwriting .

AUTHOR: Karlsdottir, Ragnheidur

AUTHOR AFFILIATION: Norwegian U of Science & Technology, Dept of Education

--Trondheim--Norway

JOURNAL: Perceptual & Motor Skills, Vol 82(2), 659-673, Apr, 1996

PUBLISHER: Perceptual & Motor Skills--US--<http://www.pr-pms.com/>

ISSN: 0031-5125--(Print)

DOCUMENT TYPE: Peer Reviewed Journal; Empirical Study; Longitudinal Study

MEDIA TYPE: Print

RECORD TYPE: Abstract

LANGUAGE: English

POPULATION GROUP: Human AGE GROUP: 100 (Childhood (birth-12 yrs)); 180

(School Age (6-12 yrs)) POPULATION LOCATION: Norway

ABSTRACT: Two experiments studied the efficiency of 2 different instructional methods for improving the growth of handwriting quality (HQ) in the upper grades of primary school. Exp 1 investigated the development of HQ of 73 children from Grades 1 to 5. In Grades 4 and 5 the effect of **copying** exercises on the development of HQ was studied by giving half of the Ss no formal **handwriting instruction** and half of the Ss **copying** exercises. No improvement in mean quality was found for the 38 Ss using the method based on **copying** exercises. Exp 2 was performed to test a hypothesis based on an information-processing model. The HQ of 41 Ss in 2 equivalent school classes was compared in Grade 4 before and after the letter forms had been reintroduced in 1 of them. A substantial improvement in mean HQ, corresponding to about 1.4 SD, was found for the 23 Ss using a method based on reintroduction of the letter forms. (PsycINFO Database Record (c) 2003 APA, all rights reserved)

DESCRIPTORS: *Cursive Writing; *Letters (Alphabet); *Teaching Methods;

Elementary School Students; Longitudinal Studies

IDENTIFIERS: **copying** exercises & reintroduction of letter forms, cursive handwriting quality, 1st-5th graders, Norway, longitudinal study

SUBJECT CODES & HEADINGS: 3530 (Curriculum & Programs & Teaching Methods)

RELEASE DATE: 19980201

CORRECTION DATE: 20031027

34/9/8 (Item 2 from file: 11)

DIALOG(R)File 11:PsycINFO(R)

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0001852442 2002-01601-034

Problems in developing functional handwriting .

AUTHOR: Karlsdottir, Ragnheidur (Email: Ragnheidur.Karlsdottir@svt.ntnu.no)

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Ragnheidur.Karlsdottir@svt.ntnu.no
JOURNAL: Perceptual & Motor Skills, Vol 94(2), 623-662, Apr, 2002
PUBLISHER: Perceptual & Motor Skills--US
ISSN: 0031-5125--(Print)
DOCUMENT TYPE: Peer Reviewed Journal; Empirical Study; Longitudinal Study
MEDIA TYPE: Print
FORMAT AVAILABILITY: Print
RECORD TYPE: Abstract
LANGUAGE: English
POPULATION GROUP: Human; Male; Female AGE GROUP: 100 (Childhood
(birth-12 yrs)); 180 (School Age (6-12 yrs)) POPULATION LOCATION: Norway
ABSTRACT: The development of **handwriting** quality and speed of 407 primary
school children was followed from Grade 1 to Grade 5 in a longitudinal
experiment. Performance was analyzed to enquire into the extent and bases
for **handwriting** dysfunction. 27% of the children were classified as
dysfunctional at the end of Grade 1. At the end of Grade 5 only 13% were
so classified. Most children had adequate perception and motor abilities
to develop functional **handwriting**. Dysfunction of **handwriting** speed could
usually be traced to dysfunction of its quality. Dysfunction of quality
could be traced to insufficient individualization in the primary
instruction in handwriting which led to a mismatch between the time
allocated to teach certain letters to certain children and the time
required for these children to learn the form of these letters. (PsycINFO
Database Record (c) 2003 APA, all rights reserved)
DESCRIPTORS: *Childhood Development; *Handwriting; *Perceptual Motor
Development
IDENTIFIERS: handwriting development; handwriting quality; handwriting
speed; functional handwriting; children
SUBJECT CODES & HEADINGS: 2820 (Cognitive & Perceptual Development)
NUMBER OF SOURCE REFERENCES: 71
NUMBER OF DISPLAY REFERENCES: 71
CITED REFERENCES:
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Motor Behavior, 3, 111-149. (PsycINFO Accession Number: 1972-22177-001)
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Journal of Special Education, 12, 68-72. (Research Suppl.)
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- RELEASE DATE: 20020731

34/9/9 (Item 3 from file: 11)
DIALOG(R) File 11:PsycINFO(R)
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0001744939 2000-14443-010
A neural model of cortico-cerebellar interactions during attentive imitation and predictive learning of sequential handwriting movements.
AUTHOR: Grossberg, S.; Paine, R. W.
AUTHOR AFFILIATION: Boston U, Dept of Cognitive & Neural Systems--Boston--MA--US
JOURNAL: Neural Networks--
<http://www.elsevier.com/inca/publications/store/8/4/1/>, Vol 13(8-9), 999-1046, Oct-Nov, 2000
PUBLISHER: Elsevier Science--United Kingdom--<http://www.elsevier.com>
Special Issue: The global brain: Imaging and modelling.
ISSN: 0893-6080--(Print)
DOCUMENT TYPE: Peer Reviewed Journal
MEDIA TYPE: Print
FORMAT AVAILABILITY: Print; Electronic
RECORD TYPE: Abstract
LANGUAGE: English
ABSTRACT: Presents the AVITEWRITE model, which describes how a person learns to make curved handwriting movements. This model incorporates aspects of two previous groups of models. The AVITEWRITE model clarifies how the cerebral cortex, the cerebellum, and basal ganglia may interact during complex learned movements. There is both cooperation and competition between reactive vision-based imitation and planned memory readout. The model suggests that there is an automatic shift in the balance of movement control between these cortical and cerebellar processes during the course of learning. The AVITEWRITE model shows how

challenging psychophysical properties of planar hand movements may emerge from this cortico-cerebellar-basal ganglia interaction. (PsycINFO Database Record (c) 2003 APA, all rights reserved)

DESCRIPTORS: *Fine Motor Skill Learning; *Interhemispheric Interaction; *Neural Networks; Basal Ganglia; Cerebellum; Cerebral Cortex; Neural Pathways

IDENTIFIERS: neural network model of interaction of cerebral cortex & cerebellum & basal ganglia during learned curved handwriting movements

SUBJECT CODES & HEADINGS: 4160 (Neural Networks)

NUMBER OF SOURCE REFERENCES: 142

NUMBER OF DISPLAY REFERENCES: 142

CITED REFERENCES:

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LANGUAGE: English
POPULATION GROUP: Human AGE GROUP: 100 (Childhood (birth-12 yrs)); 160 (Preschool Age (2-5 yrs)); 180 (School Age (6-12 yrs))
ABSTRACT: Investigated whether treatments incorporating different levels of perceptual prompting would have different effects on subsequent performance in **reproducing** model forms. 45 6-yr-old kindergarten students and 45 9-yr-old 3rd graders were given **copying** practice employing different perceptual prompts in learning to **reproduce** model letterlike forms. Conditions included **visual demonstration** of stroke sequence; visual and verbal demonstration of stroke sequence; visual and verbal demonstrations, and Ss' verbalization of stroke sequence; **copying** practice with no prompts; and control. A model form reproduction test was administered to all Ss. Analysis of statistical tests revealed that Ss trained with perceptual prompts produced significantly more accurate reproductions, with Ss' verbalization of stroke sequence being the superior treatment. (14 ref) (PsycINFO Database Record (c) 2003 APA, all rights reserved)
DESCRIPTORS: *Elementary School Students; *Handwriting; *Kindergarten Students; *Teaching Methods; *Verbal Communication; **Imitation** (Learning); Visual Displays
IDENTIFIERS: visual & verbal **prompting**, **handwriting** performance, 6 yr old kindergartners & 9 yr old 3rd graders
SUBJECT CODES & HEADINGS: 3530 (Curriculum & Programs & Teaching Methods)
RELEASE DATE: 19820901

File 1:ERIC 1966-2004/Jul 21
 File 437:Education Abstracts 1983-2004/Aug
 File 11:PsycINFO(R) 1887-2004/May W5
 File 35:Dissertation Abs Online 1861-2004/Aug
 File 121:Brit.Education Index 1976-2004/Q2

Set	Items	Description
S1	60582	LETTER? ?
S2	6992	ALPHABET? ?
S3	207807	PRINT OR PRINTS OR PRINTED OR PRINTING OR WRITE OR WRITES - OR WROTE OR WRITING
S4	667309	TEACHER? ? OR INSTRUCTOR? ? OR DEMONSTRATOR? ? OR EDUCATOR? ? OR SCHOOLTEACHER? ? OR TUTOR? ?
S5	1716066	STUDENT? ? OR PUPIL? ? OR CHILD OR CHILDREN OR LEARNER? ?
S6	559776	INDIVIDUAL? ?
S7	390095	PERSON? ? OR PEOPLE
S8	423293	ADULT? ?
S9	6790	ERASE? ? OR ERASING OR DELETE? ? OR DELETING
S10	262	(RUB OR RUBBED OR RUBBING OR RUBS OR WIPE OR WIPES OR WIPED OR WIPING) (2W) (OFF OR OUT)
S11	56441	IMITATE? ? OR IMITATING OR COPY OR COPIES OR COPIED OR COP- YING
S12	68416	REPRODUCE? ? OR REPRODUCING OR MIMIC??? OR EMULAT??? OR RE- CREAT???
S13	3303	S1(3N)S2
S14	1	S9:S10 AND S11:S12 AND S13 [not relevant]
S15	98	S3 AND S9:S10 AND S11:S12
S16	15	S1:S2 AND S15
S17	14	S16 NOT S14
S18	14	RD (unique items)
S19	1	S18/2004
S20	2	S18/2003 [not relevant]
S21	11	S18 NOT S19:S20
S22	11	Sort S21/ALL/PY,A [not relevant]
S23	1233	S1/TI,DE AND S3/TI,DE
S24	687	S9:S10 AND S11:S12
S25	0	S23 AND S24
S26	2	S23 AND S9:S10
S27	2	S26 NOT (S14 OR S16) [not relevant]
S28	6	S1 AND S2 AND S3 AND S9:S10
S29	5	S28 NOT (S14 OR S16 OR S26)
S30	5	RD (unique items)
S31	12	S1(5N)S3 AND S9:S10
S32	6	S31 NOT (S14 OR S16 OR S26 OR S28)
S33	6	RD (unique items) [not relevant]

30/7,K/2 (Item 1 from file: 11)

DIALOG(R)File 11:PsycINFO(R)

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0002102797 2003-07471-005

The role of learning experience on the perceptual organization of Chinese characters.

AUTHOR: Yeh, Su-Ling (Email: suling@ccms.ntu.edu.tw); Li, Jing-Ling;
 Takeuchi, Tatsuto; Sun, Vincent C.; Liu, Wen-Ren

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Japan; Department of Psychology, Fu-Jen Catholic University--Taipei--Taiwan;
Educational Psychology Program, Pennsylvania State University--PA--US
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Taiwan University--No. 1, Sec. 4, Roosevelt Rd.--Taipei--Taiwan--10764--
suling@ccms.ntu.edu.tw

JOURNAL: Visual Cognition--<http://www.tandf.co.uk/journals/pp/13506285.html>
, Vol 10(6), 729-764, Aug, 2003

PUBLISHER: Taylor & Francis--United Kingdom--<http://www.tandf.co.uk>

ABSTRACT: journal abstract- The effect of learning experience on the
perceived graphemic similarity of Chinese characters was examined by
comparing results of the constrained (Experiment 1) and unconstrained
(Experiment 2) shape-sorting tasks obtained from various groups of
participants with different learning experiences and ages. The results
from hierarchical cluster analysis showed that both Taiwanese and
Japanese undergraduates classified characters in relation to their
configurational structures, whereas American undergraduates, Taiwanese
illiterate adults, and kindergartners categorized characters based on
strokes or components. Although a trend of developmental changes from
local details to more globally defined patterns was found, the
identification of structure as consistently perceived by skilled readers
has to be nourished by learning experience and cannot be obtained solely
through maturation. (PsycINFO Database Record (c) 2003 APA, all rights
reserved)

...DESCRIPTORS: **Letters (Alphabet)**; *

CITED REFERENCES:

- ...M., & Chen, S. C. (1991). The effect of simplification of Chinese
character on reading and **writing**. *Chinese World*, 62, 86-104...
- ...Greenberg, S. N., Koriat, A., & Shapiro, A. (1992). The effects of
syntactic structure on **letter** detection in adjacent function words.
Memory and Cognition, 20, 663-670. (PsycINFO Accession Number: 1993...
- ...Greenberg, S. N., Koriat, A., & Vellutino, F. R. (1998). Age changes in
the missing- **letter** effect reflect the reader's growing ability to
extract the structure from text. *Journal of...*
- ...Healy, A. F. (1994). **Letter** detection: A window to unitization and
other cognitive processes in reading text. *Psychonomic Bulletin and...*
- ...1987). Characterizing the processing units of reading: Effects of intra-
and interword spaces in a **letter** detection task. In B. K. Britton, &
S. M. Glynn (Eds.), *Executive control processes in reading...*
- ...Liu, I. M. (1984). Recognition of fragment- **deleted** characters and
words. *Computer Processing of Chinese and Oriental Language*, 1, 276-287.
50...
- ...McClelland, J. L., & Rumelhart, D. E. (1981). An interactive activation
model of context effects in **letter** perception: Part 1. An account of
basic findings. *Psychological Review*, 88, 375-407. (PsycINFO Accession...
- ...Park, S., & Arbuckle, T. Y. (1977). Ideograms versus **alphabets** effect
of script on memory in "biscriptural" Korean participants". *Journal of
Experimental Psychology: Learning, Memory...*
- ...Richman, H. B., & Simon, H. A. (1989). Context effects in **letter**
perception: Comparison of two theories. *Psychological Review*, 96,
417-432. (PsycINFO Accession Number: 1989-35360...
- ...Rumelhart, D. E., & McClelland, J. L. (1982). An interactive activation
model of context effects in **letter** perception: Part 2. *Psychological
Review*, 89, 60-94. (PsycINFO Accession Number: 1982-07091-001)...
- ...Saint-Aubin, J., & Poirier, M. (1997). The influence of word function in
the missing- **letter** effect: Further evidence from French. *Memory and
Cognition*, 25, 666-676. (PsycINFO Accession Number: 1997...

File 1:ERIC 1966-2004/Jul 21
 Set Items Description
 S1 74 (TEACHING OR LEARNING) (1W) HANDWRITING
 S2 90354 "TEACHING METHODS"/DE (WAYS OF PRESENTING INSTRUCTIONAL M-
 ATERIALS O...)
 S3 858 "HANDWRITING"/DE
 S4 177 "HANDWRITING INSTRUCTION"/DE
 S5 15278 "WRITING INSTRUCTION"/DE (INSTRUCTION IN WRITTEN COMPOSIT-
 ION, GRAMMAR,...)
 S6 203 "HANDWRITING SKILLS"/DE
 S7 104 "CURSIVE WRITING"/DE (HANDWRITING CHARACTERIZED BY RUNNING
 OR FLOW...)
 S8 128 "MANUSCRIPT WRITING (HANDLETTERING)"/DE (HANDWRITING BASED
 ON ADAPTATIONS OF THE PRIN...)
 S9 101875 S2:S8
 S10 16042 S3:S8
 S11 13606 LETTER? ?
 S12 2310 ALPHABET? ?
 S13 94344 PRINT OR PRINTS OR PRINTED OR PRINTING OR WRITE OR WRITES -
 OR WROTE OR WRITING
 S14 330033 TEACHER? ? OR INSTRUCTOR? ? OR DEMONSTRATOR? ? OR EDUCATOR?
 ? OR SCHOOLTEACHER? ? OR TUTOR? ?
 S15 618081 STUDENT? ? OR PUPIL? ? OR CHILD OR CHILDREN OR LEARNER? ?
 S16 119285 INDIVIDUAL? ?
 S17 86844 PERSON? ? OR PEOPLE
 S18 96044 ADULT? ?
 S19 1252 ERASE? ? OR ERASING OR DELETE? ? OR DELETING
 S20 43 (RUB OR RUBBED OR RUBBING OR RUBS OR WIPE OR WIPES OR WIPED
 OR WIPING) (2W) (OFF OR OUT)
 S21 26992 IMITATE? ? OR IMITATING OR COPY OR COPIES OR COPIED OR COP-
 YING
 S22 22749 REPRODUCE? ? OR REPRODUCING OR MIMIC??? OR EMULAT??? OR RE-
 CREAT???
 S23 619 S19:S22 AND S10
 S24 5 S19:S20(S) S21:S22 AND S10
 S25 7 S19:S20 AND S21:S22 AND S10
 S26 2 S25 NOT S24
 S27 77 S23 AND S11
 S28 11 S12 AND S27
 S29 11 S28 NOT S24:S26
 S30 11 RD (unique items)
 S31 14 ((S11/TI,DE OR S12/TI,DE) AND S27) NOT (S24:S26 OR S28)

24/3,K/1

DIALOG(R) File 1:ERIC

(c) format only 2004 The Dialog Corporation. All rts. reserv.

01045051 ERIC NO.: ED376474 CLEARINGHOUSE NO.: CS214597

Computer Assisted Writing Instruction. ERIC Digest.

Simic, Marjorie;

CORP. SOURCE: ERIC Clearinghouse on Reading, English, and Communication,
 Bloomington, IN. (BBB30995)

4pp.

1994 (19940000)

SPONSORING AGENCY: Office of Educational Research and Improvement (ED),
 Washington, DC. (EDD00036)

...in writing, the word processor's usefulness is unparalleled. Even a

beginner can use the **delete** , strikeover, and insert functions to make simple changes. Teachers can get around the typical problem...
...processor has helped realize the advantages offered in process writing. Revising, editing, and printing multiple **copies** becomes easy. For effective use of the word processor, schools must make a commitment to...
...DESCRIPTORS: Assisted Instruction; Computer Uses in Education; Elementary Education; Peer Teaching; Teacher Role; Tutoring; *Word Processing; * **Writing Instruction** ; *Writing Processes

26/3,K/2

DIALOG(R)File 1:ERIC
(c) format only 2004 The Dialog Corporation. All rts. reserv.
01044019 ERIC NO.: ED293130 CLEARINGHOUSE NO.: CS211121
Computer-Assisted Writing Instruction. ERIC Digest Number 2.
Tone, Bruce; Winchester, Dorothy;
CORP. SOURCE: ERIC Clearinghouse on Reading and Communication Skills, Bloomington, IN. (BBB25713)
4pp.
1988 (19880000)
SPONSORING AGENCY: Office of Educational Research and Improvement (ED), Washington, DC. (EDD00036)
...student writing. Features of word processing which allow a writer to revise quickly produced hard- **copy** drafts should, it seems, effectively serve writing instruction; but until the time students have enough...
...that the students did not get opportunities to print and see their efforts in hard **copy** . Such applications provide no opportunity to evaluate the feature of computer writing that recommends itself...
...enough time-on-task to become comfortable with simple word-processing features like "insert" and " **delete** " or to use them freely in making revisions--let alone enough time to learn to...
...DESCRIPTORS: Oriented Programs; Computers; Elementary Secondary Education; Revision (Written Composition); Technological Advancement; *Word Processing; Writing Improvement; * **Writing Instruction** ; Writing Skills; Written Language

30/3,K/2

DIALOG(R)File 1:ERIC
(c) format only 2004 The Dialog Corporation. All rts. reserv.
01044503 ERIC NO.: ED331030 CLEARINGHOUSE NO.: CS010548
Reading and Writing in a Kindergarten Classroom. ERIC Digest.
Fisher, Bobbi;
CORP. SOURCE: ERIC Clearinghouse on Reading and Communication Skills, Bloomington, IN. (BBB25713)
4pp.
June 1991 (19910600)
SPONSORING AGENCY: Office of Educational Research and Improvement (ED), Washington, DC. (EDD00036)
...a writer, too. He has drawn a picture of his house and primarily written random **letters** from his name all over the pages. He has labeled house, H. He reads me...
...uses vowels in every word, and starts two of the three sentences with upper case **letters** (Fisher, 1991).
I have begun this digest with examples of the readers and writers in...
...the print, or beginning to read independently. Writing might be a drawing, scribbling, writing random **letters** , inventing spelling or beginning to write conventionally. In our classroom, when we refer to

reading...

...create meaning. When we refer to writing, we know that we mean picture drawing and **letters** and **letter** -like marks.

THE ENVIRONMENT

Our classroom is a print-rich environment. Reading and writing materials...

...A listening table is available, equipped with a tape recorder, earphones, story tapes and multiple **copies** of the accompanying text.

*Writing. The writing area contains a variety of paper, pencils, markers, crayons, rulers, a stapler, and a date stamp and pad. The **alphabet** in upper and lower case **letters** is hung at eye level, and cards with the **alphabet** and an accompanying picture representing the initial sound of the **letter** are accessible for the children to use wherever they are writing in the room. A...

...strategies that successful readers use, such as reading the sentence again, and using the beginning **letter** of a word to predict and confirm what it is. We discuss skills in context...

...DESCRIPTORS: Classroom Environment; *Kindergarten; Primary Education; Reading Instruction; Reading Writing Relationship; *Teacher Behavior; *Whole Language Approach; **Writing Instruction**

30/3,K/3

DIALOG(R)File 1:ERIC

(c) format only 2004 The Dialog Corporation. All rts. reserv.

01043857 ERIC NO.: ED272923 CLEARINGHOUSE NO.: CS210027

Handwriting Instruction: What Do We Know? ERIC Digest.

Koenke, Karl;

CORP. SOURCE: ERIC Clearinghouse on Reading and Communication Skills, Urbana, IL. (BBB06849)

3pp.

1986 (19860000)

SPONSORING AGENCY: Office of Educational Research and Improvement (ED), Washington, DC. (EDD00036)

...teaching printing should be retained in the lower grades because printing more closely resembles the **letters** found in typeset books. The digest then looks at the distinction between neatness and legibility...

...THEN CURSIVE HANDWRITING?

One primary justification for teaching children to print is that the printed **letters** look more like the typeset **letters** found in books. This rationale was taken on faith when the schools taught only traditional printing, called manuscript, which does not slant the **letters** as cursive handwriting does. Some schools now teach newer styles of printing, italic and D'Nealian for example, which slant the **letters**. Research evidence, however, indicates that printing styles do not make a difference--they are all equally allied to the typeset **letters** in books. Research also indicates that cursive handwriting is not as closely allied to typeset **letters** as are the various styles of printing (Duvall, 1986).

In addition, some evidence supports the...

...instead, to judge the quality of manuscript and handwriting subjectively. Legibility is marked by appropriate **letter** formation, size, slant, spacing, and staying on the line. A child's writing may be...

...beginner's pencil. Furthermore, by the time children reach the third grade, they produce more **letters** when they are writing stories if they use ballpoint or felt-tip pens (Askov and...

...first graders trained to print in either D'Nealian or Zaner-Bloser produced initial cursive **letters** of similar quality. In another, children in the transition group produced more legible work if they had had

Zaner-Bloser training. However, children in the D'Nealian group reversed fewer **letters** (Trap-Porter and others, 1984; Farris, 1982).

Since there does not seem to be a...to have the following characteristics: they provide opportunities for students to verbalize the rules of **letter** formation and to evaluate their own success; they also combine verbal and visual feedback, i.e., teacher explanation and demonstration, with rewriting or reinforcement (Furner, 1985).

Regardless of the program, **copying** leads to better results than just tracing or discrimination training (which helps one to read a **letter** more than to write it). However, children do not transfer knowledge of **letters** learned by **copying** to **letters** that they have not yet learned to **copy**, unless there is some demonstration by the teacher or discrimination training. When verbal instructions, such as rules for correct **letter** formation, are added to the demonstration, children do even better (Peck and others, 1980).

FOR...

...David S. Hill, Karen Swisher, and Louis J. LaNunziata. "D'Nealian and Zaner-Bloser Manuscript **Alphabets** and Initial Transition to Cursive Handwriting." JOURNAL OF EDUCATIONAL RESEARCH 77 (1984): 343-345.

This...

DESCRIPTORS: **Cursive Writing** ; * **Handwriting** ; Instructional Materials; * **Manuscript Writing (Handlettering)** ; Primary Education; Program Evaluation; *Teaching Methods; * **Writing Instruction** ; Writing Readiness; *Writing Skills

30/3,K/6

DIALOG(R)File 1:ERIC

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00608327 ERIC NO.: ED264571 CLEARINGHOUSE NO.: CS209454

What Did I Write? Beginning Writing Behaviour.

Clay, Marie M.

78pp.

1979 (19790000)

...the question of age norms, questions of method, teaching points, the value and place of **copying**, and plans of action. Chapter 2 focuses on questions of development and learning, including the...

...the contrastive principle, the abbreviation principle, and problems of page arrangement. Chapter 4 discusses the **alphabet**, punctuation, and signatures as signs, chapter 5 examines the linking of such signs to messages...

DESCRIPTORS: Abbreviations; **Alphabets** ; *Beginning Reading; *Child Development; *Developmental Stages; Early Childhood Education; Early Reading; Language Acquisition; *Language Processing; **Letters (Alphabet)** ; Orthographic Symbols; *Reading Writing Relationship; Spelling; Student Writing Models; Visual Learning; **Writing Instruction** ; Writing Processes ; *Writing Skills; Written Language

30/3,K/7

DIALOG(R)File 1:ERIC

(c) format only 2004 The Dialog Corporation. All rts. reserv.

00605120 ERIC NO.: ED261364 CLEARINGHOUSE NO.: CS208001

The Personification Method of Instruction in Penmanship.

Ardino, Jo Tagliente

7pp.

November 18, 1983 (19831118)

...in strengthening virtually all other school skills. One method of teaching **handwriting** involves personifying the **letters** in order to make writing more interesting, meaningful, and fun. The first lesson shows students...

...to hold a pen. The next lesson has the students watching the teacher write small **letters** on the board, one by one, while they **imitate** the **letters** on their paper. After the teacher is satisfied that the students have **copied** the **letters** of the **alphabet**, the teacher demonstrates on the chalkboard the difference between legible and illegible **letters** and words. This is followed by a story about the **letters** that relates small **letters** as children and the capital **letters** as adults. Then the teacher and students proceed to take each **letter**, one by one, and personify it. The same is done with capital **letters**. The object of these lessons is to teach good posture, correct movement, the formation of legible **letters**, efficient speed, and images of structure so as to guide the correct **letter** forms. (HOD)

DESCRIPTORS: **Handwriting** ; Language Arts; * **Letters** (**Alphabet**); Primary Education; Student Interests; Student Motivation; Teacher Role; *Teaching Methods; * **Writing Instruction** ; *Writing Readiness; *Writing Skills

30/3,K/9

DIALOG(R)File 1:ERIC

(c) format only 2004 The Dialog Corporation. All rts. reserv.

00446186 ERIC NO.: ED192569 CLEARINGHOUSE NO.: FL011698

Sinhala: **Basic Course. Module 1: Beginning Signs and Letters** .

MacDougall, Bonnie Graham; de Abrew, Kamini;

CORP. SOURCE: Foreign Service (Dept. of State), Washington, DC. Foreign Service Inst. (FGK27300)

119pp.

1979 (19790000)

NOTES: For related documents, see FL 011 699-700. Photographs will not **reproduce** well.

Sinhala: **Basic Course. Module 1: Beginning Signs and Letters** .

NOTES: For related documents, see FL 011 699-700. Photographs will not **reproduce** well.

...instructor. This module introduces the Sinhala writing system. The emphasis of the module is on **letter** recognition. Directions for writing the symbols in the "basic" **alphabet** are provided so that students will have a culturally appropriate and phonetically accurate method of...

DESCRIPTORS: **Alphabets** ; Learning Modules; Postsecondary Education; Reading Instruction; Second Language Instruction; *Singhalese; * **Writing Instruction** ; Written Language

30/3,K/11

DIALOG(R)File 1:ERIC

(c) format only 2004 The Dialog Corporation. All rts. reserv.

00232252 ERIC NO.: ED107372 CLEARINGHOUSE NO.: PS007895

Training Kindergarten Children in Tactile-Kinesthetic Skills Assumed to Be Related to Reading. Final Report.

Williams, Joanna P.;

CORP. SOURCE: Pennsylvania Univ., Philadelphia. (SYN72150)

86pp.

December 1974 (19741200)

NOTES: The appendix of this document has been filmed from best available **copy** but may **reproduce** poorly

SPONSORING AGENCY: National Center for Educational Research and Development

(DHEW/OE), Washington, DC. (BBB02778)

NOTES: The appendix of this document has been filmed from best available copy but may reproduce poorly

In the first experiment, the development of the ability to copy alphabet letters by black males aged 3-9 (middle and low S.E.S.) was studied, using a newly-developed scoring system. In the second experiment, kindergarteners learned to associate letter names with six lower-case printed letters by the anticipation method. The addition of an active-kinesthetic training component led to performance...

...children were studied, compared tactile-kinesthetic training and visual discrimination training on the ability to reproduce and to discriminate letters and letter-like forms. Training effects were "specific," in that discrimination training aided performance on the discrimination...

DESCRIPTORS: Age Differences; Discrimination Learning; Kindergarten Children; *Kinesthetic Methods; Letters (Alphabet); *Manuscript Writing (Handlettering); *Primary Education; Reading Development; *Reading Research; *Sensory Training; Sex Differences; Socioeconomic Influences; Tactual...

31/3,K/10

DIALOG(R)File 1:ERIC

(c) format only 2004 The Dialog Corporation. All rts. reserv.
00590524 ERIC NO.: EJ327398 CLEARINGHOUSE NO.: SP515345

The Differential Effects of Still Illustration, Motion Illustration, and Modeling on Students' Manuscript Letter Legibility.

LaNunziata, Louis J., Jr.; And Others

Journal of Educational Research, v79 n2 p109-13 Nov-Dec 1985
1985 (19850000)

...the differential effects of still illustrations, motion illustrations, and live modeling on lower-case manuscript letter formation of 24 kindergarten students. The study demonstrated that live modeling of letter formations may be an effective instructional technique for promoting increased accuracy of letter copying. (Author/MT)

DESCRIPTORS: Kindergarten; *Manuscript Writing (Handlettering); *Teaching Methods; *Writing Instruction

31/3,K/13

DIALOG(R)File 1:ERIC

(c) format only 2004 The Dialog Corporation. All rts. reserv.
00430914 ERIC NO.: EJ237224 CLEARINGHOUSE NO.: PS510169

Learning to Copy Letters : A Cognitive Rule-Governed Task.

Kirk, Ursula

Elementary School Journal, v81 n1 p28-33 Sep 1980
September 1980 (19800900)

Presents research findings that provide the basis for describing copying as a cognitive task, and suggests an approach to instruction and learning that is consistent...

DESCRIPTORS: Cognitive Processes; Elementary Education; *Elementary School Students; *Handwriting Instruction; *Handwriting Skills; *Teaching Methods

File 88:Gale Group Business A.R.T.S. 1976-2004/Sep 28
 File 47:Gale Group Magazine DB(TM) 1959-2004/Sep 29
 File 141:Readers Guide 1983-2004/Aug
 File 436:Humanities Abs Full Text 1984-2004/Aug

Set	Items	Description
S1	384784	LETTER? ?
S2	15058	ALPHABET? ?
S3	926647	PRINT OR PRINTS OR PRINTED OR PRINTING OR WRITE OR WRITES - OR WROTE OR WRITING
S4	343025	TEACHER? ? OR INSTRUCTOR? ? OR DEMONSTRATOR? ? OR EDUCATOR? ? OR SCHOOLTEACHER? ? OR TUTOR? ?
S5	1132615	STUDENT? ? OR PUPIL? ? OR CHILD OR CHILDREN OR LEARNER? ?
S6	610738	INDIVIDUAL? ?
S7	1537058	PERSON? ? OR PEOPLE
S8	255633	ADULT? ?
S9	68745	ERASE? ? OR ERASING OR DELETE? ? OR DELETING
S10	32212	(RUB OR RUBBED OR RUBBING OR RUBS OR WIPE OR WIPES OR WIPED OR WIPING) (2W) (OFF OR OUT)
S11	255133	IMITATE? ? OR IMITATING OR COPY OR COPIES OR COPIED OR COP- YING
S12	189642	REPRODUCE? ? OR REPRODUCING OR MIMIC??? OR EMULAT??? OR RE- CREAT???
S13	7	S3()S1(2W)S2
S14	2	S9:S10 AND S13
S15	2	RD (unique items) [not relevant]
S16	7	S4(10N)S3(10N)S1(10N)S9:S10
S17	7	S16 NOT S14
S18	4	RD (unique items) [not relevant]
S19	5	S13 NOT (S14 OR S16)
S20	4	RD (unique items)
S21	3	S1(3N)S9:S10(S)S1(3N)S11:S12
S22	3	S21 NOT (S13 OR S14 OR S16) [not relevant]
S23	1	S1/TI AND S2/TI AND S3/TI [too recent]
S24	40	S2(3N)S3(S)S9:S12
S25	36	S24 NOT (S13 OR S14 OR S16 OR S21 OR S23)
S26	21	RD (unique items)
S27	1	S26/2004
S28	3	S26/2003 [too recent]
S29	17	S26 NOT S27:S28
S30	17	Sort S29/ALL/PD,A
S31	38989	S1(3N)S3
S32	225	S2(S)S31
S33	18	S32 AND S9:S10 AND S11:S12
S34	14	S33 NOT (S13 OR S14 OR S16 OR S21 OR S23 OR S24)
S35	10	RD (unique items)
S36	1	S35/2004
S37	1	S35/2003
S38	8	S35 NOT S36:S37

20/3,AB,K/2 (Item 2 from file: 88)
 DIALOG(R)File 88:Gale Group Business A.R.T.S.
 (c) 2004 The Gale Group. All rts. reserv.
 03200088 SUPPLIER NUMBER: 14363015
Some perceptual and cognitive factors in mirror tracing: their limits.
 Borresen, C.R.; Klingsporn, M.J.
 The Journal of General Psychology, v120, n4, p365(10)

Oct, 1993

ISSN: 0022-1309 LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 7663 LINE COUNT: 00596

AUTHOR ABSTRACT: Three mirror tracing experiments were conducted to investigate the connection between perception and motor behavior. In the first experiment, some subjects traced a hex-maze, other subjects traced a hex-maze after observing a model trace, others traced a hex-maze after reading instructions on mirror images, and others traced a hex-maze after having observed a model and heard the instructions. There were no significant differences between the groups' error scores, but their time scores differed significantly, although not always in the predicted direction. In Experiment 2, the subjects were to trace selected letters of the alphabet. Error scores for the second experiment did not differ much from those for the first experiment. In Experiment 3, the experimenter gave each subject commands for the correct directions of movement, using the subject's body as a frame of reference. There was little improvement in motor performance. These results suggest that the visual information presented in the mirror captured the subjects' attention and blocked their motor tracing program.

... two, was, at best, only marginally successful, we decided to use automated skills (such as **printing letters** of the **alphabet**) as stimuli in the second experiment in the belief that they ought to have induced...

20/3,AB,K/4 (Item 1 from file: 436)

DIALOG(R)File 436:Humanities Abs Full Text

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04033152 H.W. WILSON RECORD NUMBER: BHUA99033152

Literate education in the Hellenistic and Roman worlds {book review}.

Morgan, Teresa

Lamberton, Robert, reviewer

The Classical Journal (Classical J) v. 95 no1 (Oct./Nov. 1999) p. 88-92

WORD COUNT: 1946

ABSTRACT: This engaging book documents elite education's clear ideological antecedents in the Greco-Roman writers on education. It juxtaposes the evidence of the elite literary sources who simultaneously describe, eulogize, and advertise literate education, on the one hand, with that of the school-hand papyri, on the other. Real gains accrue from this original approach to ancient education.

TEXT:

... education in Egypt. In its place, Morgan proposes a "core and periphery" model (71). Students **writing letters, alphabets**, words, sometimes syllabaries, and copying gnomai and short passages of Homer are ubiquitous. "Beyond these...

30/3,AB,K/3 (Item 3 from file: 88)

DIALOG(R)File 88:Gale Group Business A.R.T.S.

(c) 2004 The Gale Group. All rts. reserv.

03458742 SUPPLIER NUMBER: 15447579

Writing right. (history and logic of written languages)

Diamond, Jared

Discover, v15, n6, p106(8)

June, 1994

ISSN: 0274-7529 LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 3605 LINE COUNT: 00347

ABSTRACT: Some writing systems efficiently represent a language's

pronunciation and are thus easy to master. There is evidence of both multicultural evolution and deliberate invention for both easy and difficult systems. Historic written language design and alphabet-reform efforts are discussed.

... vanquished by the advantages of more precise alphabetic writing.

MOST AREAS of the modern world write by means of alphabets because they offer the potential advantage of combining precision with simplicity. Alphabets apparently arose only...

...alphabets were ultimately derived from that ancestral alphabet, either by idea diffusion or by actually copying and modifying letterforms.

There are two likely reasons that alphabets evolved first among Semites. First...

30/3,AB,K/4 (Item 4 from file: 88)

DIALOG(R)File 88:Gale Group Business A.R.T.S.

(c) 2004 The Gale Group. All rts. reserv.

03689287 SUPPLIER NUMBER: 17448477

Unbeatable way to reach your LEP students. (Limited-English Proficient)

Schall, Jane

Instructor (1990), v105, n1, p54(6)

July-August, 1995

ISSN: 1049-5851 LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 2940 LINE COUNT: 00237

ABSTRACT: The rise in the number of Limited-English Proficient (LEP) students as a result of the increasing diversity in classrooms brings enormous challenges to teachers. Teachers can help LEP students build their understanding of the English language by showing them pictures and objects that are familiar to them. Teachers should also encourage them to make a scrapbook containing pictures of people, places and objects that represent their personal history and to share it with other students. Other approaches which teachers can use to develop understanding and friendship among their students are presented.

... you may realize he or she knows more than you think."

* Ask the class to copy sentences from the board. Donna has students copy material in every language represented in her room. "It's great if you have a language like Korean, because children can experience what it's like to try to write in another alphabet," she says." You can discuss such questions as: What made this difficult?"

* Label objects in...

30/3,AB,K/5 (Item 5 from file: 88)

DIALOG(R)File 88:Gale Group Business A.R.T.S.

(c) 2004 The Gale Group. All rts. reserv.

03905390 SUPPLIER NUMBER: 17704630

Literacy-enriched play centers: trying them out in "the real world."

Rybczynski, Marcia; Troy, Anne

Childhood Education, v72, n1, p7(6)

Fall, 1995

ISSN: 0009-4056 LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 3624 LINE COUNT: 00290

ABSTRACT: Children learn to understand the reasons behind reading and writing in literacy-enriched play centers. Such centers allow children to pretend as grown-ups using 'real' and adult-world materials in an adult setting such as a grocery store, airport or post office. A pilot project with literacy-enriched play centers involving preschoolers is described. Guidelines for planning and managing such a center are also provided.

... wrong. Sulzby (1990) found that young children "wrote" by drawing, scribbling, marking letter-like forms, **copying** and using a mixture of invented and conventional spellings. Some children in the grocery store center scribbled, while some **wrote** random **alphabet** letters and wondered what they "said. " Other children realized that **letters** needed to be in a particular order to say something and, therefore, **copied** what they knew to be "real words." Each writing sample is valuable, because the process...

30/3,AB,K/15 (Item 15 from file: 88)
DIALOG(R)File 88:Gale Group Business A.R.T.S.
(c) 2004 The Gale Group. All rts. reserv.
05586803 SUPPLIER NUMBER: 66960816
TEACHER EDUCATION REFORM EFFORT FOR INCLUSION CLASSROOMS: KNOWLEDGE VERSUS PEDAGOGY. (preparing teachers for inclusion)
VAIDYA, SHEILA R.; ZASLAVSKY, HALLEE N.
Education, 121, 1, 145
Fall, 2000
ISSN: 0013-1172 LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 3617 LINE COUNT: 00312
AUTHOR ABSTRACT: This article presents the various challenges concerning inclusion issues that regular classrooms teachers encounter on a daily basis. Theoretical ideas are presented. A teacher's actual experience and classroom strategies used are described in detail.
... an audible voice.
* Use a crayon/pencil with assistance to trace vertical and slanted lines.
* **Reproduce** three legible **alphabet** letters in **print** .
Completing these portfolios throughout the semester allows students and parents to see growth. However, portfolios...

30/3,AB,K/16 (Item 16 from file: 88)
DIALOG(R)File 88:Gale Group Business A.R.T.S.
(c) 2004 The Gale Group. All rts. reserv.
06030501 SUPPLIER NUMBER: 82064122
Writing and reading: connections between language by hand and language by eye. (Statistical Data Included)
Berninger, Virginia W.; Abbott, Robert D.; Abbott, Sylvia P.; Graham, Steve ; Richards, Todd
Journal of Learning Disabilities, 35, 1, 39(18)
Jan-Feb, 2002
DOCUMENT TYPE: Statistical Data Included ISSN: 0022-2194
LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 11249 LINE COUNT: 01215
... 50 boys in each grade, first through sixth) were given two measures of handwriting automaticity (**printing alphabet** from memory (initial 15 seconds) and **copying** text); one measure of spelling (spelling single words from dictation); two measures of word recognition...

38/3,AB,K/7 (Item 1 from file: 141)
DIALOG(R)File 141:Readers Guide
(c) 2004 The HW Wilson Co. All rts. reserv.
04293438 H.W. WILSON RECORD NUMBER: BRGA00043438
Falling in love with Yiddish.
Goodman, Matthew.
The American Scholar (Am Sch) v. 69 no3 (Summer 2000) p. 37-47
WORD COUNT: 5430

ABSTRACT: In recent decades, Yiddish has suffered a series of devastating blows: the Holocaust, Stalin's purges, the Zionist Hebrew-language campaigns, and Jewish assimilation in the West. Despite its weakened state, Yiddish still holds a potent power for many. The writer describes his love of the Yiddish language, explains what it means for him, and examines its recent history.

TEXT:

... class began like any other language course, with simple, themed vocabulary (chalk/krayt, blackboard/tovl, **eraser** /mekér), phrases of greeting, the various forms taken by the definite article. The Yiddish words I **copied** down in my notebook (heftl, as I had now learned) in roman letters, just as...

...transliterated them here. Yiddish, though, while being primarily of Germanic derivation, uses a modified Hebrew **alphabet**, and is read, like Hebrew, from right to left. I didn't know the Hebrew...

...further complicated by the fact that handwritten Yiddish does not attempt to replicate the complicated **letters** of **printed** Yiddish, and instead uses simplified characters that may or may not resemble their printed form. So to learn Yiddish I needed to learn not just one but two new **alphabets**, and in the opening pages of that notebook I can see my first attempts to **reproduce** the sideways fishhook of the beys, the smiling profile of the pey, the grand upward...

File 350:Derwent WPIX 1963-2004/UD,UM &UP=200462

File 347:JAPIO Nov 1976-2004/May(Updated 040903)

Set	Items	Description
S1	28955	LETTER? ?
S2	4267	ALPHABET? ?
S3	975116	PRINT OR PRINTS OR PRINTED OR PRINTING OR WRITE OR WRITES - OR WROTE OR WRITING
S4	4592	TEACHER? ? OR INSTRUCTOR? ? OR DEMONSTRATOR? ? OR EDUCATOR? ? OR SCHOOLTEACHER? ? OR TUTOR? ?
S5	59493	STUDENT? ? OR PUPIL? ? OR CHILD OR CHILDREN OR LEARNER? ?
S6	256794	INDIVIDUAL? ?
S7	221868	PERSON? ? OR PEOPLE
S8	21539	ADULT? ?
S9	86609	ERASE? ? OR ERASING OR DELETE? ? OR DELETING
S10	6522	(RUB OR RUBBED OR RUBBING OR RUBS OR WIPE OR WIPES OR WIPED OR WIPING) (2W) (OFF OR OUT)
S11	216810	IMITATE? ? OR IMITATING OR COPY OR COPIES OR COPIED OR COP- YING
S12	356638	REPRODUCE? ? OR REPRODUCING OR MIMIC??? OR EMULAT??? OR RE- CREAT???
S13	1033	IC=G09B-011?
S14	5221	HANDWRITING
S15	6	S9:S10 AND S11:S12 AND (S3 OR S14) AND S13
S16	13	S9:S10 AND S11:S12 AND S13
S17	7	S16 NOT S15
S18	412	(S3 OR S14) AND S13
S19	138	S9:S12 AND S18
S20	4981	CALLIGRAPH? OR S2
S21	15	S19 AND S20
S22	13	S21 NOT (S15 OR S17)
S23	3	S9:S10 AND S11:S12 AND (S3 OR S14) AND S20
S24	1	S23 NOT (S15 OR S17 OR S21) [not relevant]
S25	753	(S1:S12 OR S14) AND S13
S26	1	PN='CA 2457280'
S27	1	S25 AND S26
S28	97	S9:S12 AND (S3 OR S14) AND S20
S29	2395885	METHOD/TI OR TECHNIQUE/TI
S30	18	S28 AND S29
S31	14	S30 NOT (S15 OR S17 OR S21 OR S23) [not relevant]
S32	61137	IC=G09B?
S33	8	(S28 AND S32) NOT (S15 OR S17 OR S21 OR S23 OR S30)

15/7/3 (Item 1 from file: 347)

DIALOG(R)File 347:JAPIO

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06824090 **Image available**

CHARACTER LEARNING WRITING TOOL

PUB. NO.: 2001-051584 [JP 2001051584 A]

PUBLISHED: February 23, 2001 (20010223)

INVENTOR(s): HIROTA KASHICHI

KANEDA MAKOTO

APPLICANT(s): KYOWA ELECTRIC & CHEM CO LTD

APPL. NO.: 11-229332 [JP 99229332]

FILED: August 13, 1999 (19990813)

ABSTRACT

PROBLEM TO BE SOLVED: To provide a magnetically writable and erasable

character learning **writing** tool.

SOLUTION: This tool is provided with a case member 61 whose upper surface is opened, and forming a frame body part surrounding the opened part on the upper surface, a **writing** sheet 64 consisting of a microcapsule magnetic sheet arranged on the case so that the surface is exposed from the opened part of the case member 61, a magnetic member for **writing** on the **writing** sheet 64 and an **erase** member having magnetism placed on the lower side of the **writing** sheet 64. Then, the **write -in** is performed by hitting the magnetic member to the surface of the **writing** sheet 64, and the written-in contents are **erased** by moving the **erase** member along the rear surface of the **writing** sheet 64, and the **copies** of the characters are displayed on the frame body of the upper surface of the case member 61.
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15/7/6 (Item 4 from file: 347)

DIALOG(R) File 347: JAPIO

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00479409

WRITING OR PRINTING PAPER WHEREON COLOR IS PRODUCED, ERASED OR CHANGED

PUB. NO.: 54-131409 [JP 54131409 A]

PUBLISHED: October 12, 1979 (19791012)

INVENTOR(s): MATSUO HIROTADA

NAKAJIMA KEIJI

YOSHIDA KATSUHIRO

APPLICANT(s): DAINICHI SEIKA KOGYO KK [000282] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 53-038791 [JP 7838791]

FILED: April 04, 1978 (19780404)

15/34/1 (Item 1 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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014360855 **Image available**

WPI Acc No: 2002-181556/200224

Electronic blackboard for teaching characters to children, has transparent portion within write -in window for tracing and writing characters printed in opaque section placed below transparent portion

Patent Assignee: RICOH ELEMEX KK (RICW)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2001171290	A	20010626	JP 99360814	A	19991220	200224 B

Priority Applications (No Type Date): JP 99360814 A 19991220

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 2001171290	A	8	B43L-001/04	

Abstract (Basic): JP 2001171290 A

NOVELTY - A transparent portion (T) within a transparent **write -in** window (W) provides a **write -in** surface. The opaque section (2) placed below the transparent portion, is **printed** with characters which are traced and **copied** to transparent portion.

USE - In teaching aids, for teaching characters to children.

ADVANTAGE - The transparent portion provides for **copying** and **erasing** information several times easily, as only opaque portion is **printed** with characters.

DESCRIPTION OF DRAWING(S) - The figure shows the schematic

cross-sectional view of electronic blackboard.

Opaque section (2)

Transparent portion (T)

Write -in window (W)

pp; 8 DwgNo 2/8

Derwent Class: P77; P85; T04; W04

International Patent Class (Main): B43L-001/04

International Patent Class (Additional): B43L-001/10; G09B-011/00

17/7/2 (Item 1 from file: 347)

DIALOG(R)File 347:JAPIO

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05888241 **Image available**

ELECTRONIC CHARACTER PRACTICE DEVICE

PUB. NO.: 10-171341 [JP 10171341 A]

PUBLISHED: June 26, 1998 (19980626)

INVENTOR(s): NAKANISHI JUNJI
MORIFUJI TSUKASA
NAGASUGI SHIGERU
INAGAWA TADAHIRO
ODAWARA TOYOSHI

APPLICANT(s): MITSUI HIGH TEC INC [325382] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 08-353057 [JP 96353057]

FILED: December 12, 1996 (19961212)

ABSTRACT

PROBLEM TO BE SOLVED: To provide a character practice device easy for repeated mention by providing a model character display part, a handwritten input part and a handwritten character display part.

SOLUTION: The handwritten input part is provided on the handwritten character display part 12 of an input pad part 13 with a liquid crystal display, and handwritten information inputted by a light pen, a magnetic pen and a pressure pen, etc., is read. When an arrow keys 18, 19 are depressed, characters are moved in the horizontal direction, and the Japanese syllabary are moved in the left or right direction. When the arrow key 17 is depressed, the Japanese syllabary are changed to KATAKANA (square form of Japanese syllabary) characters in the state as it is, and when the arrow key 16 is depressed, they are returned to the original HIRAGANA (Japanese syllabary). The arrow keys 16-19 are depressed, and the characters for practice are displayed on the model character display part 11. When a handwritten input is inputted from the handwritten input part, a line as it is mentioned on the handwritten character display part 12. When a clear key is depressed, the handwritten input is **erased** successively from the last.

17/7/3 (Item 2 from file: 347)

DIALOG(R)File 347:JAPIO

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05583152 **Image available**

PRACTICE PLATE FOR CALLIGRAPHY AND SUBSTITUTIVE LIQUID AGENT FOR CHINESE INK

PUB. NO.: 09-197952 [JP 9197952 A]

PUBLISHED: July 31, 1997 (19970731)

INVENTOR(s): IWAO HARUO
TOI TOSHIO

APPLICANT(s): MIKEN KK [490452] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 08-123780 [JP 96123780]
FILED: May 17, 1996 (19960517)

ABSTRACT

PROBLEM TO BE SOLVED: To obtain the calligraphy practice plate which allows free rewriting and is suitable as a practice plate by providing a frosted glass type plate body and a background surface layer which is provided on the reverse side of the frosted glass type plate body and partially reflects or absorb light transmitted through the frosted glass type plate body.

SOLUTION: The calligraphy practice plate 10 is equipped with the one-side polished reinforced frosted glass plate 11. On the entire reverse surface of this reinforced polished glass plate 11, i.e., the surface where no polishing glass process is done, a black back sheet 12 is placed in contact or stuck. The back sheet 12 constitutes the background surface layer and partially reflects or at least partially absorbs the light transmitted through the reinforced polished glass plate 11. Consequently, characters written on the polished glass surface of the polished glass plate body can easily be wiped and **erased** with wet cloth, etc., and characters can be written thereupon soon, so rewriting is made free.

17/7/5 (Item 4 from file: 347)

DIALOG(R) File 347:JAPIO

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01159189

COLORABLE AND ERASABLE WRITTING GOOD

PUB. NO.: 58-096589 [JP 58096589 A]

PUBLISHED: June 08, 1983 (19830608)

INVENTOR(s): ISHII KOICHI

APPLICANT(s): PILOT PEN CO LTD THE [000502] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 56-194786 [JP 81194786]

FILED: December 03, 1981 (19811203)

ABSTRACT

PURPOSE: To obtain a colorable and erasable writting good having a capability that a colored holograph is formed on a writting sheet by a coloring tool, the holograph is **erased**, and a colored holograph is again formed on the same writting sheet.

CONSTITUTION: A writting sheet (A) is formed of 10-30wt% a leuco compound (e.g., Crystal violet lactone), 50-85wt% a high molecular compound (e.g., acrylic resin), and 5-15wt% a tertiary amine (e.g., tribenzylamine). A coloring tool (B) is obtained by using a chromogenic liquid in which a phenolic compound capable of allowing the coloration of said leuco compound is dissolved. Also, a decolorizer (C) is obtained by using a sorbitan ester and/or glycol. A colorable and erasable writting good is made up of said three components. A holograph formed on a writting sheet can be **erased** by a mechanical abrasion if a short time is elapsed after forming the holograph and also by a color **eraser** after a long time is elapsed.

17/7/7 (Item 6 from file: 347)

DIALOG(R) File 347:JAPIO

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00045316

METHOD OF TRANSFER, **ERASING** AND REEMERGENCE BY CHELATE COLORING

PUB. NO.: 52-004316 [JP 52004316 A]

PUBLISHED: January 13, 1977 (19770113)

INVENTOR(s): NISHIDA YOSHITSUGU

HORIUCHI SHINJI
APPLICANT(s): KURETAKE KOGYO KK [425027] (A Japanese Company or
Corporation), JP (Japan)
APPL. NO.: 50-079496 [JP 7579496]
FILED: June 24, 1975 (19750624)

22/34/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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013639503
WPI Acc No: 2001-123711/200114

**Imitation Song-Dynasty-style script model for practising in fountain pen
Chinese calligraphy and making method thereof**

Patent Assignee: XING S (XING-I)

Inventor: XING S

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
CN 1147120	A	19970409	CN 96109524	A	19960823	200114 B

Priority Applications (No Type Date): CN 96109524 A 19960823

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
CN 1147120	A		G09B-011/06	

Abstract (Basic): CN 1147120 A

NOVELTY - A **calligraph** model for training the **writing** of
imitation Song-Dynasty type features that modified white plastic board
is used and the imitation Song-Dynasty types are made on the board by
hot press with embossing alloy steel plate. Its advantages are saving
paper, clear characters, high durability and better training effect.

DwgNo 0/0

Derwent Class: P85

International Patent Class (Main): G09B-011/06

22/34/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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013430703
WPI Acc No: 2000-602646/200058

**Well-behaved series form and its writing scientific training and
accelerated method**

Patent Assignee: RANG C (RANG-I)

Inventor: RANG C

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
CN 1143231	A	19970219	CN 95109280	A	19950812	200058 B

Priority Applications (No Type Date): CN 95109280 A 19950812

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
CN 1143231	A		G09B-011/06	

Abstract (Basic): CN 1143231 A

NOVELTY - The present invention relates to the **copying** books,
exercise books and tracing books for learning to **write** Chinese
characters and **relevant methods**. The check series includes several
check forms, including Guimi check, Guitian check, Guiju check, Guixing
check and rectangular check. Using the said check forms can **print**

various copybooks for fast raising the **calligraphy** level of exerciser.

DwgNo 0/0

Derwent Class: P85

International Patent Class (Main): G09B-011/06

22/7/8 (Item 1 from file: 347)

DIALOG(R)File 347:JAPIO

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06856367 **Image available**

CALLIGRAPHY TRAINING IMPLEMENT

PUB. NO.: 2001-083869 [JP 2001083869 A]

PUBLISHED: March 30, 2001 (20010330)

INVENTOR(s): SEI AKIO

APPLICANT(s): SEI AKIO

APPL. NO.: 11-257911 [JP 99257911]

FILED: September 10, 1999 (19990910)

ABSTRACT

PROBLEM TO BE SOLVED: To efficiently improve **copying** ability which nor only enables a user to easily locate a model **handwriting** form stated with characters as models simply by applying the form to the return part of a **calligraphy** training implement but also enables the user to assure a name entry column and to easily visually recognize the display region of the model characters without staining the model **handwriting** form which is an important copybook.

SOLUTION: This **calligraphy** training implement has a transparent sheet 2, the return part formed on at least one side of the transparent sheet 2, a rear side sheet 5 returned via the return part 3 and/or adhered to the return part, a frame display part (6) formed by opening a margin part of 5 to 15 mm, more preferably 8 to 10 mm from the return part 3 of the transparent sheet 2 and divided display parts 7 dividing the frame display part (6) to prescribed segments. Since the model **handwriting** form has the return part, the margin allowing the statement of the name may be assured and simultaneously the copybook may be set at an adequate position necessary for **handwriting** of the copybook while the balance over the entire part is maintained simply by inserting the model **handwriting** form stated with the characters which are the models at a prescribed position between the transparent sheet and the rear side sheet and fixing the same with the return part.

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22/7/9 (Item 2 from file: 347)

DIALOG(R)File 347:JAPIO

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06532468 **Image available**

UNDERLAY FOR **CALLIGRAPHIC** **COPYING** , PINCHING MEMBER FOR **CALLIGRAPHY** ,
CALLIGRAPHIC UTENSIL, AND **CALLIGRAPHIC** **COPYING** METHOD

PUB. NO.: 2000-118191 [JP 2000118191 A]

PUBLISHED: April 25, 2000 (20000425)

INVENTOR(s): YAMADA AKIE

APPLICANT(s): YAMADA AKIE

APPL. NO.: 10-297364 [JP 98297364]

FILED: October 19, 1998 (19981019)

ABSTRACT

PROBLEM TO BE SOLVED: To prevent a sumi ink from penetrating into a sample **copy** which is laid on a base.

SOLUTION: On a base cloth 1 made of a fabric, a sheet 2 comprising a transparent resin, and a net 3 through which characters for a sample copy can be seen on the sheet are laminated and arranged, and at least on one edge portion, the base cloth 1, the sheet 2 and the net 3 are fixed. By this constitution, a sample paper on which sample characters are printed is arranged between the base cloth 1 and the sheet 2, and a practicing paper is arranged on the net 3, and when the visible sample characters are copied on the practicing paper with a calligraphic brush, a sumi ink can be prevented from penetrating into the sample paper.

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22/7/11 (Item 4 from file: 347)

DIALOG(R) File 347:JAPIO

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05060594 **Image available**

LETTER WRITING IMPROVING DEVICE, CALLIGRAPHY TRAINING DEVICE AND
CALLIGRAPHY TRAINING METHOD USING THE CALLIGRAPHY TRAINING DEVICE

PUB. NO.: 08-016094 [JP 8016094 A]

PUBLISHED: January 19, 1996 (19960119)

INVENTOR(s): TSUCHIYA TOKIHIDE

APPLICANT(s): TSUCHIYA TOKIHIDE [000000] (An Individual), JP (Japan)

APPL. NO.: 06-182700 [JP 94182700]

FILED: July 01, 1994 (19940701)

ABSTRACT

PURPOSE: To improve the writing of letters by a simple operation, by displaying the writing order of a letter on a display such as a liquid crystal display through an electric means.

CONSTITUTION: A letter writing improving unit is composed of a liquid crystal display unit 1, a central controller 2, a touch panel sensor 3, a function converting switch 4, and an IC card reading unit 5 for training aid. On the display such as the liquid crystal display unit 1, the writing order of a letter is made possible to display through an electric means. By the display of the whole body of the letter, the user can learn the reading way as well as learn the writing way of the letter through a pattern. When a writing order start switch is pushed, the position to put a writing brush at first at every stroke is shown by the flashing of clots, and when the brush is put on the position, the remaining parts of that stroke are displayed slowly, and the user moves the brush slowly along the display. When the user finishes the writing of the stroke, the starting point of the next stroke is shown by the flashing, and the writing of one letter is to be finished by repeating the operation of the brush at the number of the strokes again and again. Such a writing order training is repeated again and again.

22/7/12 (Item 5 from file: 347)

DIALOG(R) File 347:JAPIO

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04854039 **Image available**

UTENSIL FOR CALLIGRAPHY

PUB. NO.: 07-146639 [JP 7146639 A]

PUBLISHED: June 06, 1995 (19950606)

INVENTOR(s): ABO NAOHIKO

APPLICANT(s): ABO NAOHIKO [000000] (An Individual), JP (Japan)

APPL. NO.: 05-317495 [JP 93317495]

FILED: November 25, 1993 (19931125)

ABSTRACT

PURPOSE: To enable a user to exactly **write** the positions and inclinations of lines constituting a character in compliance with a **copy** and to learn how to **write** the beautiful characters by displaying a square frame and scales to equally divide the respective pieces of this frame to ≥ 4 even numbers on the surface of a sheet.

CONSTITUTION: This utensil 1 for **calligraphy** is formed by displaying the square frame 3 of a proper size, the scales 4 to equally divide the respective pieces of the frame 3 to ≥ 4 (for example, 8) even numbers and vertical and horizontal center lines 5, 6 connecting the central points of the respective pieces of the frame 3 on the surface of the sheet 2 consisting of a synthetic resin having a smooth surface. The scale 4 formed on the top piece of the frame 3 is provided with codes 14 from 0 to 8 successively from the left and a 'center' is displayed at the central point of the lower piece. The scale 4 formed at the left piece is provided with codes from 0 to 8 successively from above and the 'heart' is displayed at the central part of the right piece so as to avoid confusion with the center of the horizontal direction. Further, the plural frames 3 are displayed at the same size or different sizes on the surface of the sheet 2 to enable many times of training.

22/7/13 (Item 6 from file: 347)

DIALOG(R) File 347:JAPIO

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04122047 **Image available**

CALLIGRAPHY LEARNING DEVICE

PUB. NO.: 05-113747 [JP 5113747 A]

PUBLISHED: May 07, 1993 (19930507)

INVENTOR(s): NAGAMINE KIMIHIRO

APPLICANT(s): CASIO COMPUT CO LTD [350750] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 03-301217 [JP 91301217]

FILED: October 22, 1991 (19911022)

ABSTRACT

PURPOSE: To judge whether the **calligraphy** of a character/figure is appropriate compared to a model.

CONSTITUTION: An input display device 13 is provided with a display device 15 and a **handwriting** input device 17, and when the learning object character/figure is assigned, the character/figure read from a type face-**writing** order dictionary memory 12 is display-outputted as a model from the display device 15. When the character/figure displayed on the display device 15 is traced by the **handwriting** input device 17, a deviation judging circuit 21 inspects whether the **handwriting** input is within the range of the set level set in the type face-**writing** order dictionary memory 12 on the basis of an error between the input result and the model so as to judge the appropriateness of the input result.

33/34/1 (Item 1 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

013807333

WPI Acc No: 2001-291545/200131

Recreation and learning apparatus

Patent Assignee: LIU B (LIUB-I)

Inventor: LIU B

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
CN 1282057	A	20010131	CN 99111705	A	19990724	200131 B

Priority Applications (No Type Date): CN 99111705 A 19990724

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
CN 1282057	A		G09B-019/22	

Abstract (Basic): CN 1282057 A

NOVELTY - The present invention relates to a **recreation** learning appliance. It is formed from a plane body on which the heroic portrait, **alphabet**, sun pattern and moon pattern are **printed**, and is characterized by making people know heroes, learn pronunciation and raise dialogue level of standard Chinese pronunciation by means of **recreation**.

DwgNo 0/0

Derwent Class: P85

International Patent Class (Main): G09B-019/22

33/7/8 (Item 3 from file: 347)

DIALOG(R)File 347:JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

04004580 **Image available**

LEARNING DEVICE FOR **CALLIGRAPHY**

PUB. NO.: 04-369680 [JP 4369680 A]

PUBLISHED: December 22, 1992 (19921222)

INVENTOR(s): NAGAMINE KIMIHIRO

APPLICANT(s): CASIO COMPUT CO LTD [350750] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 03-173404 [JP 91173404]

FILED: June 19, 1991 (19910619)

ABSTRACT

PURPOSE: To input a character or pattern according to an input range which is indicated and displayed, stroke by stroke, in its stroke order.

CONSTITUTION: An input display device 14 has a display device 15 which displays characters and patterns and a **handwriting** input device 16 for inputting tracking data when the characters and patterns displayed on the display device 15 are tracked. A character shape and stroke order dictionary memory 12 is stored with the shapes of the characters and patterns and their stroke order data. A CPU 11, a display control circuit 13, and a guidance display control circuit 20 reads a character or pattern to be learnt out of the character shape and stroke order dictionary memory 12 and makes a guidance display of the stroke order on the display device 15.

File 348:EUROPEAN PATENTS 1978-2004/Sep W03

File 349:PCT FULLTEXT 1979-2002/UB=20040923,UT=20040916

Set	Items	Description
S1	105932	LETTER? ?
S2	5859	ALPHABET? ?
S3	270334	PRINT OR PRINTS OR PRINTED OR PRINTING OR WRITE OR WRITES - OR WROTE OR WRITING
S4	3530	TEACHER? ? OR INSTRUCTOR? ? OR DEMONSTRATOR? ? OR EDUCATOR? ? OR SCHOOLTEACHER? ? OR TUTOR? ?
S5	57663	STUDENT? ? OR PUPIL? ? OR CHILD OR CHILDREN OR LEARNER? ?
S6	434220	INDIVIDUAL? ?
S7	313348	PERSON? ? OR PEOPLE
S8	62219	ADULT? ?
S9	102197	ERASE? ? OR ERASING OR DELETE? ? OR DELETING
S10	6424	(RUB OR RUBBED OR RUBBING OR RUBS OR WIPE OR WIPES OR WIPED OR WIPING) (2W) (OFF OR OUT)
S11	124956	IMITATE? ? OR IMITATING OR COPY OR COPIES OR COPIED OR COP- YING
S12	115954	REPRODUCE? ? OR REPRODUCING OR MIMIC??? OR EMULAT??? OR RE- CREAT???
S13	80	IC=G09B-011?
S14	0	S9:S10(S)S11:S12 AND S13
S15	26	S9:S12 AND S13

15/3,AB/1 (Item 1 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

01563254

Drawing aid assembly

Zeichenlerngerat

Dispositif pour apprendre a dessiner

PATENT ASSIGNEE:

Hasbro Inc., (3910180), 1027 Newport Avenue, P.O. Box 1059, Pawtucket, RI
02862-1059, (US), (Applicant designated States: all)

INVENTOR:

Jacobs, Warren Leigh, 30 Alfred Road, London W3 6LH, (GB)

LEGAL REPRESENTATIVE:

Skone James, Robert Edmund (50281), GILL JENNINGS & EVERY Broadgate House
7 Eldon Street, London EC2M 7LH, (GB)

PATENT (CC, No, Kind, Date): EP 1300820 A1 030409 (Basic)

APPLICATION (CC, No, Date): EP 2001308558 011008;

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G09B-011/06

ABSTRACT EP 1300820 A1

A drawing aid assembly is provided, having a tracing screen (5). A light generating assembly (13) is arranged to cause a light spot to impinge upon a first side of the tracing screen (5) and the light spot is transmitted to a second side of the tracing screen (5) such that the position of the light spot may be recorded by a user. A controller (11) controls the light generating assembly (13) such that the light spot is arranged to impinge at a number of predetermined positions upon the tracing screen in accordance with a figure to be traced. A store (12) is also provided for retaining data defining a number of figures, the store (12) being accessible by the controller (11). A selector is provided for

selecting a figure to be traced from the number of figures within the store.

ABSTRACT WORD COUNT: 142

NOTE: Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200315	746
SPEC A	(English)	200315	5146
Total word count - document A			5892
Total word count - document B			0
Total word count - documents A + B			5892

15/3,AB/9 (Item 5 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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01064619

HAND-WRITING PRACTICING SYSTEM

SYSTEME D'EXERCICE D'ECRITURE A LA MAIN

Patent Applicant/Inventor:

HARPAZ Yehouda, 129 Corrie Road, Cambridge, Cambridgeshire CB1 3QQ, GB,
GB (Residence), GB (Nationality)

Patent and Priority Information (Country, Number, Date):

Patent: WO 200394132 A1 20031113 (WO 0394132)

Application: WO 2003GB1407 20030331 (PCT/WO GB0301407)

Priority Application: GB 200210178 20020503

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG
SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE
SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 1935

English Abstract

A **hand-writing** practicing system is comprised of a computer with a screen that can sense the movement of a stylus on it, and software the displays to the user original script in **hand-writing**, record the stylus movement as user-writing and display it on top of the original script.

15/3,AB/16 (Item 12 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00903341

METHOD AND APPARATUS FOR TEACHING ALPHABET LETTERING

PROCEDE ET APPAREIL POUR ENSEIGNER LA FORMATION DES LETTRES DE L'ALPHABET

Patent Applicant/Inventor:

GERARDINO Mildred, 603 Monroe Street, Hoboken, NJ 07030, US, US
(Residence), US (Nationality)

Serial 10/775323

September 30, 2004

Legal Representative:

BLACKMON Robert N (agent), Blackmon IPS & Law Office, 2101 Crystal Plaza
Arcade PMB #289, Arlington, VA 22202, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200237450 A1 20020510 (WO 0237450)

Application: WO 2000US28874 20001102 (PCT/WO US0028874)

Priority Application: WO 2000US28874 20001102

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI
GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV
MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ
UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 3972

English Abstract

A method and apparatus for lettering through graphical and color association. Each letter (10) is composed of strokes or motions which the pen follows to create the letter. By assigning each motion to a particular color, a student can visualize the creation of the letter. By differentiating the color for motions that proceed in different directions, the student can distinguish between letters that are similar, but facing different directions such as the "b" and the "d". Additionally, when the letters are presented as finished letters with the individual "strokes" of the letter shown in the layered collage of stroke colors and with directional arrows (24) provided, a student can "see" the parts that make up the letter and more easily understand how to reproduce the letter. A book for teaching the method is also presented.

15/3,AB/17 (Item 13 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00852941

AN INTERACTIVE, COMPUTER-AIDED HANDWRITING METHOD AND APPARATUS WITH
ENHANCED DIGITIZATION TABLET

PROCEDE INTERACTIF D'ECRITURE MANUSCRITE ASSISTEE PAR ORDINATEUR, ET
APPAREIL EQUIPE D'UNE TABLETTE DE NUMERISATION AMELIOREE

Patent Applicant/Assignee:

JRL ENTERPRISES INC, 912 Constantinople Street, New Orleans, LA 70115, US,
US (Residence), US (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

LEE John R, 912 Constantinople Street, New Orleans, LA 70115, US, US
(Residence), US (Nationality), (Designated only for: US)

Legal Representative:

PALAN Stephen W (et al) (agent), Burns, Doane, Swecker & Mathis, L.L.P.,
P.O. Box 1404, Alexandria, VA 22313-1404, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200186612 A1 20011115 (WO 0186612)

Application: WO 2001US40686 20010508 (PCT/WO US0140686)

Priority Application: US 2000203912 20000512

Serial 10/775323

September 30, 2004

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL
TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 6895

English Abstract

A digitizing tablet (190) for use in handwriting analysis is described. The tablet includes a digitizing layer (1920) for translating pressure from a stylus (1930) into digital information, a display layer (1910) for providing visible output that corresponds to a student's use of the stylus (1930) on the tablet, and an overlay layer (1900) for protecting the display layer (1910) and providing an electro-mechanical mechanism for erasing the displayed contents.

15/3,AB/20 (Item 16 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00758883

APPARATUS FOR TRAINING HANDWRITING**APPAREIL D'APPRENTISSAGE DE L'ECRIURE**

Patent Applicant/Assignee:

REVELATION COMPUTING PTY LIMITED, 1 Matisse Street, Carseldine, QLD 4034,
AU, AU (Residence), AU (Nationality), (For all designated states
except: US)

Patent Applicant/Inventor:

CRAGO Robert Sanders, 1 Matisse Street, Carseldine, Qld 4034, AU, AU
(Residence), AU (Nationality), (Designated only for: US)

Legal Representative:

INTELLPRO, Level 7, Reserve Bank Building, 102 Adelaide Street, (GPO Box
1339, Brisbane, Qld, 4001), Brisbane, Qld 4000, AU

Patent and Priority Information (Country, Number, Date):

Patent: WO 200072290 A1 20001130 (WO 0072290)

Application: WO 2000AU491 20000522 (PCT/WO AU0000491)

Priority Application: SU 516 19990521

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU
LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR
TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 7469

English Abstract

An apparatus is provided for training **hand writing**. The apparatus comprises a processor means, input means having an array of pressure sensing elements arranged adjacent to a substantially flat surface, visual indication means (10) for indicating signals from said processor means, and hand held means for writing on said surface and thereby applying pressure on the sensing elements touched by the hand held means. The input means is adapted to provide input signals from said touched sensing elements to the processor means which thereby provides indication signals corresponding to said input signals for visually indicating the writing on said indication means. The apparatus also comprises memory means and program means adapted to store in said memory means signals corresponding to strokes or sections of strokes when writing with said hand held means on said surface, and to selectively control said processor means to retrieve the stored signals and to provide the retrieved signals to the indication means for indicating the strokes in the same order of writing. The program means may include a zone setting arrangement for setting a teacher zone (12) and a student zone (14), and control buttons (22 to 30) on the indication means for respectively clearing writing on the indication means (10), replaying the writing, and setting parameters.

15/3,AB/23 (Item 19 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00276477

MODEL PROVIDING PERCEPTIONAL LEARNING OF CHARACTERS AND PEN THEREFOR
MODELE PERMETTANT L'APPRENTISSAGE DES CARACTERES D'ECRITURE PAR PERCEPTION
ET CRAYON UTILISE A CET EFFET

Patent Applicant/Assignee:

HATANAKA Naoyuki,

Inventor(s):

HATANAKA Naoyuki,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9424653 A1 19941027

Application: WO 94JP644 19940418 (PCT/WO JP9400644)

Priority Application: JP 93130151 19930421

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

US AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

Publication Language: Japanese

English Abstract

According to the current science, the human body and brain have many functions and capacities which can be effectively made available. A method of perceptually learning characters using an instrument while stretching muscles of fingers and hands is rational. Characters are learnt at present by learning methods such as **copying**, transfer, etc., but the learning method can be improved by using a bearing pen and a model storing the handwriting of rising and falling and strokes of the pen to improve culture. The present invention provides an instrument for rationally learning correct and beautiful characters.

15/3,AB/25 (Item 21 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00198482

AN EDUCATIONAL AID

JOUET EDUCATIF

Patent Applicant/Assignee:

MULLEY Keith John,

Inventor(s):

MULLEY Keith John,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9115840 A1 19911017

Application: WO 91GB505 19910402 (PCT/WO GB9100505)

Priority Application: GB 907296 19900331; GB 9025671 19901126

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AT AU BE BR CA CH DE DK ES FR GB GR IT JP KR LU NL SE SU US

Publication Language: English

Fulltext Word Count: 1941

English Abstract

A child is enabled to **reproduce** an image (a picture, lettering etc.), "marqued" on a translucent sheet so as to be substantially invisible under reflected light but visible from one side when lit from the other side, by the use of a light box comprising a base box (10) having a cover (12) which includes a removable translucent diffuser plate (18) which is retained, together with the marqued sheet overlaid on it, in grooves in the cover (12). A light source is mounted in the base box (10).

File 350:Derwent WPIX 1963-2004/UD,UM &UP=200462
File 347:JAPIO Nov 1976-2004/May(Updated 040903)
File 344:Chinese Patents Abs Aug 1985-2004/May
File 371:French Patents 1961-2002/BOPI 200209

Set	Items	Description
S1	71724	ERAS??? OR (RUB OR RUBS OR RUBBED OR RUBBING OR WIPE? ? OR WIPING) (2W) (OUT OR OFF)
S2	601255	IMITAT? OR COPY??? OR COPIE? ? OR REPRODUC??? OR MIMIC? OR EMULAT? OR RECREAT?
S3	6042	LETTER? ? (1N) (FORMING OR FORMATION) (S) ALPHABET OR CALLIGRAPHY OR HANDWRITING OR CURSIVE() WRITING
S4	1131	IC=G09B-011
S5	32	S1:S2 AND S3 AND S4
S6	2	S1 AND S2 AND S3 AND S4
S7	0	S5NOT S6
S8	30	S5 NOT S6
S9	914106	MEMORY OR MEMORIZ? OR MEMORIS?
S10	20	S2(S)S3(S)S9
S11	19	S10 NOT S5

6/7,K/2 (Item 2 from file: 347)

DIALOG(R)File 347:JAPIO

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05401271 **Image available**

CALLIGRAPHY TRAINING DEVICE

PUB. NO.: 09-016071 [JP 9016071 A]

PUBLISHED: January 17, 1997 (19970117)

INVENTOR(s): KITANO KAZUHIKO

APPLICANT(s): TOHOKU RICOH CO LTD [416866] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 07-165751 [JP 95165751]

FILED: June 30, 1995 (19950630)

ABSTRACT

PURPOSE: To enable a user to effectively and efficiently execute training of **calligraphy**.

CONSTITUTION: Water wiring paper 3 is freely movably housed in a body case 1 and a writing window 4 for writing characters with a water writing brush 5 on the water writing paper 3 is formed in the main body case 1. Further, the device is provided with a character selecting means 16 for selecting the characters to be trained, an ink jet head 7 for writing characters on the water writing paper 3 by splashing liquid drops in accordance with the character data of the selected characters and an **erasing** means 9 for **erasing** the characters formed on the water writing paper 3 by drying the water writing paper 3.

INTL CLASS: G09B-011/06 ; B41J-002/01; B41J-002/485; B41J-005/30;
G06F-003/12

...JAPIO CLASS: Sports & Recreation); 29.4 (PRECISION INSTRUMENTS...

8/34/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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014220977 **Image available**

WPI Acc No: 2002-041675/200205

Digitizing tablet for handwriting analysis in educational institution, has overlay layer which erases displayed input on display layer when stylus is moved from display layer

Patent Assignee: JRL ENTERPRISES INC (JRLJ-N); LEE J R (LEEJ-I)
Inventor: LEE J R
Number of Countries: 096 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200186612	A1	20011115	WO 2001US40686	A	20010508	200205 B
AU 200159836	A	20011120	AU 200159836	A	20010508	200219
US 20030162152	A1	20030828	WO 2001US40686	A	20010508	200357
			US 2003275900	A	20030226	
US 6758674	B2	20040706	US 2000203912	P	20000512	200444
			WO 2001US40686	A	20010508	
			US 2003275900	A	20030226	

Priority Applications (No Type Date): US 2000203912 P 20000512; US
2003275900 A 20030226

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 200186612	A1	E	49	G09B-011/00	
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Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ
PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200159836	A				
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Based on patent WO 200186612

US 20030162152	A1			G09B-011/00	
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US 6758674	B2			G09B-019/00	
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Provisional application US 2000203912

Based on patent WO 200186612

Abstract (Basic): WO 200186612 A1

NOVELTY - The tablet has a digitizing layer (1920) which digitizes input from stylus (1930) and displays it on display layer (1910) formed on it. An overlay layer (1900) **erases** displayed input, when stylus is moved away from the display layer.

USE - For use in **handwriting** analysis in educational institutions such as schools etc.

ADVANTAGE - Provides teachers and parents with the opportunity to create and update educational material to students. Real time communication between student and teacher allows teacher to be informed of student's progress.

DESCRIPTION OF DRAWING(S) - The figure shows the **handwriting** analysis tablet.

Overlay layer (1900)

Display layer (1910)

Digitizing layer (1920)

Stylus (1930)

pp; 49 DwgNo 19/20

Derwent Class: P85; T01; T04; W04

International Patent Class (Main): G09B-011/00 ; G09B-019/00

8/7/16 (Item 6 from file: 347)

DIALOG(R)File 347:JAPIO

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05181881 **Image available**

MEHTOD AND DEVICE FOR **HANDWRITING** CHARACTER PRACTICE

PUB. NO.: 08-137381 [JP 8137381 A]

PUBLISHED: May 31, 1996 (19960531)

INVENTOR(s): KOYAMA KAZUO

SAKAI ICHIRO
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FURUICHI YOSHIO

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(Japan)

TOSHIBA COMPUT ENG CORP [486760] (A Japanese Company or
Corporation), JP (Japan)

APPL. NO.: 06-274627 [JP 94274627]

FILED: November 09, 1994 (19941109)

ABSTRACT

PURPOSE: To immediately indicate the location of the cause of an incorrect input to a user and to let the user to surely recognize the locus of the input stroke.

CONSTITUTION: When a user selects 'A', for example, as a practice object character using a character selection button 1001, the character 'A' is displayed in a region 1004 along with the order of strokes 1, 2 and 3. Moreover, a guide mark 1005 is displayed in a character input region 1000. A user inputs the strokes of the 'A' in accordance with the guide mark. If the input point goes out of an allowable range, a message indicating the above fact is shown in the bottom section of the range 1000 and the user is asked to re-input the character. Thus, the user recognizes the deviation between the inputted character and the correct character while he is inputting the character and corrects the error. Since the mark 1005 is displayed in accordance with the progress made in the input, the model and the locus of the strokes made by the user are clearly distinguished and the practice is made easy.

8/7/19 (Item 9 from file: 347)

DIALOG(R) File 347:JAPIO

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04821734 **Image available**

WRITING LEARNING DEVICE

PUB. NO.: 07-114334 [JP 7114334 A]

PUBLISHED: May 02, 1995 (19950502)

INVENTOR(s): NAGAMINE KIMIHIRO

APPLICANT(s): CASIO COMPUT CO LTD [350750] (A Japanese Company or
Corporation), JP (Japan)

APPL. NO.: 05-262244 [JP 93262244]

FILED: October 20, 1993 (19931020)

ABSTRACT

PURPOSE: To make a learner possible to obtain not only tracing form of characters, graphics, etc., but also evaluation by taking consideration of time to finish writing, the order of stroking, etc., alone without needing instructors in a writing learning device.

CONSTITUTION: When model patterns of characters, etc., optionally selected from a basic dictionary memory 18 are displayed together with their orders of stroke by a display device 12 and the model patterns are traced and inputted by a **handwriting** input device 15 in accordance with the orders of stroking, its tracing error is discriminated by an error discriminating circuit 20 in accordance with a difference between the display position coordinate of the model patterns and a tracing position coordinate to be discriminated by a coordinate discrimination circuit 16, **handwriting** tracing time is measured by a tracing time measuring circuit 22, a tracing error and tracing time are compared with a deciding level set beforehand by a level setting circuit 25, acceptance rejection and judged points are decided at an acceptance or rejection/judged points decision circuit 24 and

displayed.

8/7/20 (Item 10 from file: 347)
DIALOG(R)File 347:JAPIO
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04771866 **Image available**
DEVICE FOR LEARNING STROKE ORDER OF CHARACTER
PUB. NO.: 07-064466 [JP 7064466 A]
PUBLISHED: March 10, 1995 (19950310)
INVENTOR(s): IGARASHI KENJI
APPLICANT(s): CASIO ELECTRON MFG CO LTD [486038] (A Japanese Company or Corporation), JP (Japan)
CASIO COMPUT CO LTD [350750] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 05-212043 [JP 93212043]
FILED: August 27, 1993 (19930827)

ABSTRACT

PURPOSE: To provide a device for learning the stroke order of characters, allowing the stroke order of any characters to be easily learned through repetition.

CONSTITUTION: When a character designated by a keyboard portion 3 is kana, a CPU 12 reads the pattern data and stroke-order data of kana characters from a CG ROM 16; when the character is kanji, the CPU 12 reads from the CG ROM 16 the pattern data and stroke-order data of the kanji recognized by use of the kanji dictionary of a kanji ROM 15, and then causes an LCD 6 to blink to display the pattern of that portion which corresponds to the first stroke of the character. When information entered from a digitizer 8 about **handwriting** done with a pen 10 is correct, the mode of display is switched from blinking to full-light, and the pattern of that portion which corresponds to the next stroke is displayed by blinking light in accordance with the stroke-order data. After the pattern of the final stroke has been displayed, the correctness of the stroke order is indicated. If no correct handwritten entry is done even a predetermined time after the patterns have been displayed by blinking light, the incorrectness of the stroke order is indicated and processing is complete.

8/7/22 (Item 12 from file: 347)
DIALOG(R)File 347:JAPIO
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04035967 **Image available**
CHARACTER PRACTICE DEVICE
PUB. NO.: 05-027667 [JP 5027667 A]
PUBLISHED: February 05, 1993 (19930205)
INVENTOR(s): HOSOE NORIYUKI
APPLICANT(s): SONY CORP [000218] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 03-203316 [JP 91203316]
FILED: July 19, 1991 (19910719)

ABSTRACT

PURPOSE: To practice characters on an input means by using a display as an example and to eliminate the need for paper by displaying the characters to be practiced on a display means by a control means.

CONSTITUTION: A character shape stroke order memory 8 is stored with the shapes and stroke order of various characters and a **handwriting** character input device 2 is transparent and arranged over a display device 10. The controller 6 is constituted including a processor and a program and

controls the **handwriting** character input device 2, the character shape stroke order memory 8, and the display device 10. Namely, the controller 6 displays the characters to be practiced on the display device 10 according to the shapes of the characters stored in the character shape stroke order memory 8 and displays handwritten characters inputted from an input device 2 on the display device 10. The controller 6 compares the shapes of the handwritten characters inputted from the input device 2 with the shapes and stroke order of the characters stored in the stroke order memory 8 and displays the comparison result on the display device 10.

8/7/23 (Item 13 from file: 347)

DIALOG(R) File 347:JAPIO

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03594583 **Image available**

QUALITY EVALUATION SYSTEM AND TRAINING/EDUCATING SYSTEM FOR HANDWRITING CHARACTER

PUB. NO.: 03-257483 [JP 3257483 A]

PUBLISHED: November 15, 1991 (19911115)

INVENTOR(s): KATO TAKAHITO
YOKOZAWA KAZUHIKO

APPLICANT(s): EI TEI AARU SHICHIYOUKAKU KIKOU KENKIYUUSHIYO KK [000000] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 02-056219 [JP 9056219]

FILED: March 07, 1990 (19900307)

ABSTRACT

PURPOSE: To attain objective evaluation by a machine and the educational training of characteristics by evaluating quality objectively with the weighted sum of plural evaluation scales matching human's subject evaluation standards, and digitizing and outputting the evaluation result.
CONSTITUTION: Evaluation scale arithmetic parts 21 - 23... 2n calculate evaluation scales $x(\text{sub } 1) - x(\text{sub } 3) \dots x(\text{sub } n)$ by using plural scales generated so as to represent features of human's subject evaluation according to an analysis of the evaluation of whether human handwritten characters are beautiful or not. Then weight arithmetic parts 31 - 33... 3n perform multiplication by weight values $a(\text{sub } 1) - a(\text{sub } 3) \dots a(\text{sub } n)$ so that the weighted sum of the values $x(\text{sub } 1) - x(\text{sub } 3) \dots x(\text{sub } n)$ of the respective evaluation scales equals the human subject evaluated value and supply the results to an evaluated value arithmetic part 4 together with a constant (c) generated by a constant generation part 6. An evaluated value arithmetic part 4 adds the constant to the values of the respective scales multiplied by the weight to calculate and display the evaluated value E on a display 5. Consequently, the quality of handwritten character shapes can be evaluated objectively and whether or not the handwritten characters are beautiful or not is pointed out to attain the training education of the handwritten characters.

8/7/25 (Item 15 from file: 347)

DIALOG(R) File 347:JAPIO

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02399463 **Image available**

PENMANSHIP LEARNING DEVICE

PUB. NO.: 63-016363 [JP 63016363 A]

PUBLISHED: January 23, 1988 (19880123)

INVENTOR(s): NAITOU FUMIKADO

APPLICANT(s): FUJI ELECTRIC CO LTD [000523] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 61-159844 [JP 86159844]
FILED: July 09, 1986 (19860709)

ABSTRACT

PURPOSE: To attain the automatic correction in a penmanship learning system by registering previously the model **handwriting** of a specialist penman and collating it with the clean **copy** of a learner.

CONSTITUTION: The model **handwriting** is digitized at an input part 2 and stored temporarily in the frame memory of a memory part 3. The character information stored by an analyzing part 4 is analyzed and registered to the part 3 as the model character information. The clean **copy** of a learner is corrected based on the registered model character information. The clean **copy** is digitized at the part 2 and stored temporarily in the frame memory of the part 3. A collation part 5 collates the character information stored and to be corrected with said model character information. The result of this collation is outputted from an output part 6 in the form of the result of correction.

8/7/26 (Item 16 from file: 347)

DIALOG(R) File 347:JAPIO

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01052287

CALLIGRAPHY PRACTICING DEVICE

PUB. NO.: 57-202587 [JP 57202587 A]

PUBLISHED: December 11, 1982 (19821211)

INVENTOR(s): TAKAHASHI TOKUMATSU

APPLICANT(s): TAKAHASHI TOKUMATSU [000000] (An Individual), JP (Japan)

APPL. NO.: 56-087333 [JP 8187333]

FILED: June 06, 1981 (19810606)

8/7/30 (Item 4 from file: 344)

DIALOG(R) File 344:Chinese Patents Abs

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1104541

MODEL FOR CALLIGRAPHY PRACTISING

Patent Assignee: ZHAO NAN (CN)

Author (Inventor): ZHAO NAN (CN)

Number of Patents: 001

Patent Family:

CC	Number	Kind	Date
CN	86104541	A	880127 (Basic)

Application Data:

CC	Number	Kind	Date
*CN	86104541	A	860715

Abstract: Especially during practising and copying, it is only to use water other than to use papers and ink. It is suitable for calligraphy practising and copying for students and other people. It consists of a plate, a frame and a board for hand-writing. When using this system to practise and copy calligraphy, one can write with a writing brush and use water as ink. When copying the model of calligraphy, one can put it under the board for hand-writing.

11/7/16 (Item 7 from file: 347)

DIALOG(R) File 347:JAPIO

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04199852 **Image available**

BLACKBOARD PROVIDED WITH COPYING FUNCTION

PUB. NO.: 05-191552 [JP 5191552 A]
PUBLISHED: July 30, 1993 (19930730)
INVENTOR(s): SHIBATA TADASHI
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company
or Corporation), JP (Japan)
APPL. NO.: 04-004514 [JP 924514]
FILED: January 14, 1992 (19920114)

ABSTRACT

PURPOSE: To form a blackboard provided with a copying function where the information inputted on an input board the information of a display part is copied by providing an electronic display part on an input board, and displaying a present data, time, and order number, etc., for identifying the information inputted on the input board.

CONSTITUTION: The information is inputted to an input board 13 by **handwriting** or sticking or the information is electronically inputted to an information input device 1. Then, the information inputted to the device 1 is edited by an information editing device 2. And also, a clock device 10 which clocks the present date and time is provided, the information is read by a clock information reader 11, the device 10 is controlled by a clock controller 9, and the information outputted from the device 2 and the device 11 is written in a **memory** writer 3. The information of the order number, etc., stored in a **memory** device 4 provided at the input board 13 is displayed at a display device 5. Then, the information on the input board 13 is **copied** by scanning a scanner 12 on the input board 13.

11/7/17 (Item 8 from file: 347)

DIALOG(R) File 347:JAPIO

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01290533 **Image available**

ELECTRONIC BLACKBOARD INPUT CONTROLLING SYSTEM

PUB. NO.: 59-002133 [JP 59002133 A]
PUBLISHED: January 07, 1984 (19840107)
INVENTOR(s): OYA NOBUMASA
APPLICANT(s): FUJITSU LTD [000522] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 57-112390 [JP 82112390]
FILED: June 29, 1982 (19820629)

ABSTRACT

PURPOSE: To store that which retouches and corrects an input from a handwriting input board on said reproduced and displayed picture, by reproducing/and displaying a past picture in a handwriting information device.

CONSTITUTION: When **reproducing** and displaying a picture, a changeover switch 13 is turned on, same 14 and same 15 are set to a synthesizing circuit 11 side and a synthesizing circuit 12 side, respectively, and a **reproducing** picture number is designated. As a result, **handwriting** information is fetched from a picture file 7A, is provided to a picture **memory** 6, and is **reproduced** on a picture display 4. In this case, when a retouching/correcting input is executed from a **handwriting** input board 1, the information is stored in the **memory** 6 and the file 7 through a changeover switch 14 and the synthesizing circuit 11, and a retouched/corrected picture is displayed on a display 2. Also, its **handwriting** information is written in 1 of the file 7A. In this regard, processing is executed so that this **handwriting** information is related (chained) to a picture corresponding to a designated picture number in the picture file.

File 348:EUROPEAN PATENTS 1978-2004/Sep W03

File 349:PCT FULLTEXT 1979-2002/UB=20040923,UT=20040916

Set	Items	Description
S1	283688	ERAS??? OR (RUB OR RUBS OR RUBBE3D OR RUBBING OR WIPE? ? OR WIPING) (2W) (OUT OR OFF) OR MEMORY OR MEMORIZ? OR MEMORIS?
S2	220647	IMITAT? OR COPY??? OR COPIE? ? OR REPRODUC??? OR MIMIC? OR EMULAT? OR RECREAT?
S3	2711	LETTER? ?(1N) (FORMING OR FORMATION) (S)ALPHABET OR CALLIGRA-PHY OR HANDWRITING OR CURSIVE()WRITING
S4	80	IC=G09B-011?
S5	0	S1(S)S2(S)S3 AND S4
S6	14	S3 AND S4
S7	8	S1:S2 AND S6
S8	6	S6 NOT S7 [duplicates or not relevant]

7/3,AB,K/3 (Item 2 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00902217

ALPHANUMERIC EDUCATION AND LEARNING DISORDER DETECTION SYSTEM

SYSTEME D'ENSEIGNEMENT ALPHANUMERIQUE ET DE DETECTION DE TROUBLE D'APPRENTISSAGE

Inventor(s):

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200235499 A2-A3 20020502 (WO 0235499)

Application: WO 2001US46109 20011024 (PCT/WO US0146109)

Priority Application: US 2000242941 20001024; US 2000705312 20001103

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK
SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

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Publication Language: English

Filing Language: English

Fulltext Word Count: 15704

English Abstract

A system, including an apparatus and method, for educating children and detecting learning disabilities. According to the referred apparatus, the system comprises a local device (102) cooperative with a remote device. The local device consists of a CPU (202), speech generator (204), volatile memory (206), non-volatile memory (208), Alphabet letter keypad (130), game selector (142), mode selector (146), speaker (214), display (134), writing tablet (136) and signal transmitter (126). The

system presents a plurality of games requiring written input of alphabet letters to assist educators and parents in detecting learning disorders, such as dyslexia, in children at an early age. The games are selectable (142), allowing a child to write characters on a tablet (136). These characters are then analyzed for proper formation and audible feedback provided to the child (204).

Main International Patent Class: G09B-011/00

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... of such charts, a child would attempt to write the letters of the alphabet by **mimicking** the form of the letters displayed in the charts. Then, the child would, either alone...by the user (i.e., the instructions of which are stored in a non-volatile **memory** and executed by a central processing unit) and which allow the user to select a...

...depression of the switches of the writing tablet essentially digitizing the writing strokes), utilizes a **handwriting** recognition process to determine the letter input, or written, by the user. The **handwriting** recognition process, in an attempting to recognize a letter written by the user, determines (i...

...erroneously written, or formed, a letter. Preferably, in order to make such determinations, the **handwriting** recognition process compares the number of strokes forming an input letter, the direction of the...

...letter which is unrecognizable and is, hence, written erroneously, the system utilizes a backwards 4

handwriting detection method to determine whether the input letter has been written backwards. To do so, the backwards **handwriting** detection method, preferably, compares the starting position and direction of the first stroke of the...preferred embodiment. The local device of the alternate embodiment also includes a processor, and game, **handwriting** recognition, and backwards **handwriting** detection software which operate and utilize methods substantially similar to that of the preferred embodiment...

...the phonetic sound(s) of numbers with the their visible appearance. The methods of the **handwriting** recognition and backwards **handwriting** detection software, similar to those of the preferred embodiment, detect a properly formed number, an...the preferred embodiment of the present invention.

FIG. 10 is a flowchart representation of a **handwriting** recognition and evaluation method of the alphanumeric education and learning disorder detection system in accordance...

...preferred embodiment of the present invention.

FIG. II is a flowchart representation of a backwards **handwriting** detection method of the alphanumeric education and learning disorder detection system in accordance with the...204 for producing signals representative of and convertible into speech by a speaker, a volatile **memory** 206 for storing intermediate and temporary data, and a non-volatile **memory** 208 for storing operating system 15 software instructions and for storing software instructions of...

...appropriate operation of the local device 102 when executed by processor 200. The non-volatile **memory** 208 also stores a set of data (also referred to herein as "stroke set data...

...may be stored for a particular alphabet letter.

The CPU 202, speech generator 204, volatile **memory** 206, and non-volatile **memory** 208 connect to a bus 210 which enables the

communication of instructions and/or data therebetween. Preferably, the volatile **memory** 206 includes random access **memory** (RAM) and the non-volatile **memory** 208 includes read-only **memory** (ROM). The processor 200 further includes a plurality of input/output ports 212...

...the present invention includes a processor 200 having a CPU 202, speech generator 204, volatile **memory** 206, non-volatile **memory** 208, and input/output ports 212 residing on single or multiple integrated circuit chips...

...3 by the CPU 202 into data related to each stroke for subsequent use in **handwriting** recognition and backwards **handwriting** detection processes 1000, I 1 00 described below and includes, for example and not limitation ...304 for producing signals representative of and convertible into speech by a speaker, a volatile **memory** 306 for storing intermediate and temporary data, and a non-volatile **memory** 308 for storing operating system software instructions and for storing software instructions of programs or...

...remote device 144 when executed by processor 300. The CPU 302, speech generator 304, volatile **memory** 306, and non-volatile **memory** 308 connect to a bus 3 1 0 which enables the communication of instructions and/or data therebetween. Preferably, the volatile **memory** 306 includes random access **memory** (RAM) and the nonvolatile **memory** 308 includes read-only **memory** (ROM). The processor 300 further includes a plurality of input/output ports 312 (i.e....

...the present invention includes a processor 300 having a CPU 302, speech generator 304, volatile **memory** 306, non-volatile **memory** 308, and input/output ports 312 residing on single or multiple integrated circuit chips.
The...

...by the system 100 as a plurality of program instructions which reside in non-volatile **memory** 208 and which are executed by CPU 202 (and, as appropriate, residing in non-volatile **memory** 308 and executed by CPU 302). Speech generated by the system 100 in association with...

...the system 1 00 as a plurality of program instructions which reside in non-volatile **memory** 208 and which are executed by CPU 202. After starting at step 402 and performing...direction of each stroke. At step 628, CPU 202 evaluates the collected data, using the **handwriting** recognition and evaluation method I 000 and, if no correctly formed alphabet letter has been written, the backwards **handwriting** detection method I I 00, and determines (i) if the upper case alphabet letter was ...associated with each stroke that the user makes as the user attempts to write the **alphabet** letter having the spoken sound(s) on the writing tablet 136. Such information includes, for example and not limitation, information related to the starting point the user used to begin **forming** the **letter**, the number of strokes made by the user, the starting point of each stroke, and...

...of each stroke. Continuing, CPU 202 evaluates, at step 822, the collected data, using the **handwriting** recognition and evaluation method 1000 and determines whether an **alphabet** letter was written by the user on the writing tablet 136 and, if so, what **alphabet** letter was written. If no correctly written **alphabet** letter is recognized, the backwards **handwriting** detection method II 00 is used to determine whether the user has written a letter...not limitation, information pertaining 22 to the starting point the user used to begin **forming** the **letter**, the number of strokes made by the user, the starting point of each stroke, and...

...of each stroke.
Proceeding to step 928, CPU 202 evaluates the collected data, using the **handwriting** ition and evaluation method 1 000, and determines whether an alphabet letter was recogm written...
...what alphabet letter was written. If no correctly written alphabet letter is recognized, the backwards **handwriting** detection method 1100 is used to determine if the user has written a letter backwards...
...the process for the same desired letter.
FIG. 10 displays a flowchart representation of a **handwriting** recognition and evaluation method 1000 for evaluating a user written letter of the alphanumeric education...
...disorder detection system 100 in accordance with the preferred embodiment of the present invention. The **handwriting** recognition and evaluation method 1000 is used by and in conjunction with the various methods...
...by the user (i.e., that a letter was erroneously formed by the user). The **handwriting** recognition and evaluation method 1000 evaluates data collected from the writing tablet 136 during writing...
...user (i.e., "collected data") against 23 the stroke set data stored in non-volatile **memory** 208, described above, for the letters of the alphabet. The collected data for the letter... number of strokes of the current stroke set (i.e., which is stored in nonvolatile **memory** 208) to determine if the number of strokes of the input letter matches the 1...
...has been evaluated against the last set of stroke set data stored in non-volatile **memory** 208 for the letters of the alphabet. If not, CPU 202 sets the pointer to...
...has been evaluated against the last set of stroke set data stored in non-volatile **memory** 208, CPU 202 sets a return code (i.e., for use by the game method calling or utilizing the **handwriting** recognition and evaluation method I 000) at step 1016, indicating that the input letter has...
...does not match the respective stroke data of any stroke set stored in non-volatile **memory** 208) and that the input letter has been written erroneously by the user.
24
Then, at step 101 8, the **handwriting** recognition and evaluation method 1 000 returns control of the operation of CPU 202 to...
...or associated with, the current stroke set (i.e., which are stored in non-volatile **memory** 208). If the compared directions match, CPU 202 branches, at step 1024, to evaluate the...
...has been evaluated against the last set of stroke set data stored in non-volatile **memory** 208 for the letters of the alphabet. 1 5 If, at step 1026, CPU 202...
...has been evaluated against the last set of stroke set data stored in non-volatile **memory** 208, CPU 202 sets, at step 1030, a return code (i.e., for use by the game method calling or utilizing the **handwriting** recognition and evaluation method I 000) which indicates that the input letter has not been...
...does not match the respective stroke data of any stroke set stored in non-volatile **memory** 208) and that the input letter has been written erroneously by the user. Then, at step 1032, the **handwriting** recognition and evaluation method I 000 returns control of the operation of CPU 202 to...has been evaluated against the last set of stroke set data stored in non-volatile **memory** 208 for the letters of the alphabet.

If not, CPU 202 sets the pointer to...
...has been evaluated against the last set of stroke set data stored in non-volatile **memory** 1 5 208, CPU 202 sets a return code (i.e., for use by the game method calling or utilizing the **handwriting** recognition and evaluation method 1000) at step 1046, indicating that the input letter has not...
...does not match the respective stroke data of any stroke set stored in non-volatile **memory** 208) and that the input letter has been written erroneously by the user. Then, at step 1048, the **handwriting** recognition and evaluation method 1000 returns control of the operation of CPU 202 to the...
...requested recognition of the input letter.
FIG. II illustrates a flowchart representation of a backwards **handwriting** detection method I I 00 according to the preferred embodiment of the alphanumeric education and learning disorder detection system 100. The backwards **handwriting** detection method 1100 is used by and in conjunction with the various methods of the...
...user (i.e., the "Input letter"), in response thereto, has been written backwards. The backwards **handwriting** detection method I I 00 evaluates data collected from the writing tablet 136 during writing...
...the user (i.e., "collected data") against the stroke set data stored in non-volatile **memory** 208, described above, for the letters of the alphabet. The collected data for the letter...
...of the first three dots of the strokes of the letter.
According to the backwards **handwriting** detection method I I 00, after starting at step 1102 and initializing various parameters, CPU...
...requested letter using the stroke set data for the requested letter stored in non-volatile **memory** 208. Then, CPU 202 decides, at step 1 108, whether the compared starting positions match...
...requested letter has been written backwards by the user. At step II 12, the backwards **handwriting** detection method I 1 00 returns control of the operation of CPU 202 to the game method which requested backwards **handwriting** detection.
If, at step I 108, CPU 202 decides that the compared starting positions of...
...is then returned, at step II 22, wr1
to the game method which requested backwards **handwriting** detection. If, at step II 18, CPU 202 determines that none of the compared respective...
...the operation of the system 100 is returned to the game method which requested backwards **handwriting** detection.
According to a **handwriting** recognition and evaluation method of a first alternate embodiment of the present invention, each letter formed. Such definitions are stored in non-volatile **memory** 208' of the local device 102' prior to its use. Each letter also has a...
...alphabet letters 1 5 and for numerals have been created and stored in non-volatile **memory** 208'.
Whenever an input letter is examined in accordance with a game method using the **handwriting** recognition method of the first alternate embodiment on the input letter, the starting point of...
...then the input letter has been erroneously written by the
28 user. Note that the **handwriting** recognition and evaluation method of the first alternate embodiment is also employable, in a substantially...
...device 102" of the second alternate embodiment also includes a processor 200" and game and **handwriting** recognition and evaluation software, stored in non-volatile **memory** 208", which operate and utilize methods substantially similar to their counterparts in the preferred embodiment.

However, in the second alternate embodiment of the system 100", the games and **handwriting** recognition and evaluation software are configured, respectively, to teach and recognize numbers of the number...
...the phonetic sound(s) of numbers with the their visible appearance. The methods of the **handwriting** recognition software are, likewise, substantially similar to those of the preferred embodiment and detect a...
...writing strokes input by the user against stroke set data, stored in the non-volatile **memory** 208" of the local device 102", which define, for example and not limitation, the correct...

Claim

... device for receiving from the user writing strokes possibly indicative of the identified character;
a **memory** for storing data corresponding to the identified character, wherein the data includes at least one...
...apparatus of Claim 1, wherein the writing system includes a plurality of characters and said **memory** is further operable to store data descriptive of the correct formation of the respective characters...